

RESOLUTION NO. 2014-40

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE TOWN OF FOUNTAIN HILLS, ARIZONA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE TOWN AND TRACTOR SUPPLY COMPANY.

BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF FOUNTAIN HILLS as follows:

SECTION 1. The Development Agreement between the Town of Fountain Hills and Tractor Supply Company is hereby approved in substantially the form and substance attached hereto as Exhibit A and incorporated herein by reference.

SECTION 2. The Mayor, the Town Manager, the Town Clerk and the Town Attorney are hereby authorized and directed to execute all documents and take all steps necessary to carry out the purpose and intent of this Resolution.

PASSED AND ADOPTED by the Mayor and Council of the Town of Fountain Hills, September 18, 2014.

FOR THE TOWN OF FOUNTAIN HILLS:

ATTESTED TO:




Linda M. Kavanagh, Mayor



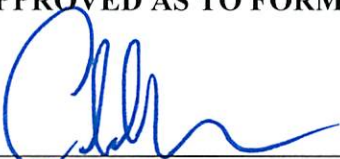
Bevelyn J. Bender, Town Clerk

REVIEWED BY:

APPROVED AS TO FORM:



Kenneth W. Buchanan, Town Manager



Andrew J. McGuire, Town Attorney

EXHIBIT A
TO
RESOLUTION NO. 2014-40

[Development Agreement]

See following pages.

WHEN RECORDED RETURN TO:
Town of Fountain Hills
Attn: Town Clerk
16705 East Avenue of the Fountains
Fountain Hills, Arizona 85268

DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT (this "Agreement") is entered into September 18, 2014, (the "Effective Date") by and between the TOWN OF FOUNTAIN HILLS, an Arizona municipal corporation (the "Town") and FOUNTAIN HILLS DEVELOPMENT GROUP, LLC, a North Carolina limited liability company (the "Developer"). The Town and Developer are sometimes referred to herein collectively as the "Parties," or individually as a "Party."

RECITALS

A. Developer has a real estate purchase contract for the acquisition of approximately 4.02 acres of real property located at the southeast corner of Shea Boulevard and Monterey Drive, Fountain Hills, Arizona, as more particularly described and depicted in Appendix A of the "Project Narrative Report for TSC Fountain Hills," date stamped July 28, 2014, by Nicholas E. Brown (the "Project Narrative"), which is attached hereto as Exhibit A and incorporated herein by this reference (the "Property").

B. It is the Developer's intention to develop the Property as a retail store offering products for home improvement; agriculture; lawn and garden; clothing; and livestock, equine and pet care (the "Project").

C. The Town has determined that encouraging the development of the Property pursuant to this Agreement will result in significant economic and other public purpose benefits to the Town and its residents by, among other things (i) the construction of public improvements, (ii) the development of the Property in a manner consistent with the Town's General Plan, (iii) an increase in sales tax revenues to the Town arising from or relating to the development of the Property and (iv) the creation of new jobs and otherwise enhancing the economic welfare of the residents of the Town.

D. The Parties understand and acknowledge that the Town seeks assurances from the Developer that the Developer will complete the acquisition of the Property and thereafter develop the Project on the Property in accordance with the "Plan of Development" (defined in Section 3.1 below), including the Project Narrative.

E. The Parties understand and acknowledge that this Agreement is a “Development Agreement” within the meaning of and entered into pursuant to the terms of ARIZ. REV. STAT. § 9-500.05, in order to facilitate the proper development of the Property by providing for, among other things (i) conditions, terms, restrictions and requirements for the Property by the Town, (ii) the permitted uses for the Property, (iii) the density and intensity of such uses and (iv) other matters related to the development of the Property. The terms of this Agreement shall constitute covenants running with the Property as more fully described in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals, which are incorporated herein by reference, the following mutual covenants and conditions, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Town and the Developer hereby agree as follows:

1. Incorporation of Recitals. The foregoing recitals are true and correct and incorporated by this reference as if fully set forth herein.

2. Term and Effective Date. The Developer, its successors and assigns, shall have the right to implement development on the Property in accordance with this Agreement for a period of five years from the date this Agreement is approved by the Mayor and Town Council of the Town (the “Town Council”), at which time this Agreement shall automatically terminate as to the Property without the necessity of any notice, agreement or recording by or between the Parties (the “Term”); provided, provisions of this Agreement that specifically survive the termination of this Agreement shall remain in full force and effect, subject only to the termination provisions herein specifically related thereto. This Agreement shall become effective only upon approval by the Town Council.

3. Development Standards.

3.1 Plan of Development. The various exhibits attached hereto and this Agreement collectively constitute a “Plan of Development” which includes modifications to the Town of Fountain Hills Subdivision Ordinance (the “Subdivision Ordinance”) and the Town of Fountain Hills Zoning Ordinance (the “Zoning Ordinance”). It is the intent of the Parties that the Project be constructed in accordance with the Subdivision Ordinance and the Zoning Ordinance as amended by the terms of this Agreement. This Agreement is limited in scope in that its sole purpose is to allow for the limited set of modifications to the Subdivision Ordinance and Zoning Ordinance set forth herein.

3.2 Further Council Approval. The Parties hereby agree and understand that, subsequent to the execution of this Agreement, and based upon the Town’s review and due consideration, including without limitation, the conduct of the requisite public hearings, the Town Council shall consider approval of a final site plan for the Property that includes the deviations from the Subdivision Ordinance and Zoning Ordinance permitted herein.

4. Deviations from Subdivision Ordinance and Zoning Ordinance.

4.1 Hillside Disturbance. The Parties agree that the areas with slopes between 10% - 20% and 20% - 30% shown as “previously disturbed” on Exhibit B, attached hereto and incorporated herein by reference, are exempt under Subsection 5.04(B)(1)(a) of the Subdivision Ordinance as, such areas were disturbed in relation to construction of Shea Boulevard and Monterey Drive.

4.2 Parking. The Parking Ratios required in Zoning Ordinance Subsection 7.04(G) are modified to allow parking at the following ratios: Retail (17,709 sf) @ 1 space/300 sf = 59 spaces; Outdoor Display & Stockroom (23,761 sf) @ 1 space/900 sf = 27 spaces; Total minimum parking requirement of 86 spaces.

4.3 Special Use Permit. A Special Use Permit according to Zoning Ordinance Subsections 12.05(C) and 12.07(A) is hereby granted for Permanent Outdoor Display Areas as depicted on the Display Area Exhibit included in Appendix B of the Project Narrative (Exhibit A to this Agreement).

4.4 Drainage. The Drainage Detention Requirements of the Zoning Ordinance Section 3.08 and Town Code Section 14-7 are modified to require that the Property provide a minimum detention volume of 8,000 cubic feet and be developed in accordance with the Preliminary Grading and Drainage Plan attached hereto as Exhibit C and the Drainage Report for TSC Fountain Hills attached hereto as Exhibit D, each of which are incorporated herein by reference.

5. Developer's Obligations. Developer shall perform all of its duties as set forth in this Agreement. Developer's failure to timely perform its obligations as set forth below shall constitute a breach of this Agreement and shall cause the immediate termination of this Agreement upon expiration of the applicable cure period without further action by the Town Council.

5.1 Zoning Adherence and Performance. Developer agrees to develop the Project in accordance with the C-2 zoning district as modified by this Agreement.

5.2 Acquisition of the Property. Developer agrees to complete the acquisition of the Property (close escrow and confirm ownership) for development of the Project not later than six months after the Effective Date.

5.3 Construction Documents. Developer shall prepare and submit to the Town for the Town's review and approval, the construction documents for the Project in accordance with all of the Town's requirements.

5.4 Construction on Property. Developer shall submit complete construction documents for the Project, receive building permits for vertical construction on the Property according to such construction documents, and commence construction on the Property of such vertical components of the Project not later than 18 months after the Effective Date. For the

purposes of this Subsection, (A) “vertical construction” shall mean construction of exterior walls of the retail buildings on the Property and shall also include adjacent horizontal hardscape, surface stabilization and all related activities and (B) “commence construction” shall mean the mobilization of sufficient construction resources to the Property to complete the Project according to the Town’s requirements.

5.5 Building Permits. Developer shall secure all grading, building and construction permits that may be required by the Town and any other governmental agency prior to starting any site grading or construction activities on the Property.

5.6 Developer Infrastructure Improvements. Developer shall design, construct and dedicate to the Town public sidewalks and landscaping of the public right of way associated with the Project (the “Infrastructure Improvements”). The Town will review and approve the Infrastructure Improvements needs as part of its approval of the construction documents.

5.7 Infrastructure Assurance. Prior to the commencement of construction of any Infrastructure Improvements, the Developer shall provide appropriate assurances in such form and amount as required by the Town Engineer to assure that the installation of Infrastructure Improvements within the Property or other Infrastructure Improvements directly related to such building permit or permits will be completed (the “Infrastructure Assurance”).

5.8 Dedication and Acceptance. Upon completion by Developer of any public Infrastructure Improvements, the Developer shall promptly (A) notify the Town in writing of the presumptive completion of such Infrastructure Improvements and (B) dedicate to the Town, at no cost to the Town, such Infrastructure Improvements free and clear of all liens and encumbrances and in accordance with Town standards applicable to such dedication and acceptance. So long as such Infrastructure Improvements are constructed in accordance with Town standards, as verified by the inspection of the completed Infrastructure Improvements by the Town Engineer, all punch list items have been completed and the Infrastructure Improvements are free of any liens and encumbrances, the Town shall accept the Infrastructure Improvements. The Town shall notify the Developer, in writing, of the Town’s acceptance of the Infrastructure Improvements. Acceptance of any Infrastructure Improvement is expressly conditioned upon Developer providing a warranty for such Infrastructure Improvement consistent with Town standards and as provided in Section 5.9 below. After acceptance of any Infrastructure Improvements, the Town thereafter shall maintain, repair and operate such Infrastructure Improvements at its own cost, which obligation shall survive any termination of this Agreement. Developer, at no cost to Town, shall dedicate, convey or obtain, as applicable all rights-of-way, rights of entry, easements and/or other use rights, wherever located, as useful or necessary for the operation and maintenance of the Infrastructure Improvements as required by the Town.

5.9 Warranty. Developer or its assignee shall give to the Town a one-year warranty for all Infrastructure Improvements or other such warranty as required by the Town Engineer, which warranty shall begin on the date that the Town accepts the Infrastructure Improvements as provided in this Section. Any material deficiencies in material or workmanship identified by Town staff during the one-year warranty period shall be brought to the attention of the Developer or its assignee that provided the warranty, which shall promptly remedy or cause

to be remedied such deficiencies to the reasonable satisfaction of the Town Engineer. Continuing material deficiencies in a particular portion of the Infrastructure Improvements shall be sufficient grounds for the Town to require (A) an extension of the warranty for an additional one-year period and (B) the proper repair of or the removal and reinstallation of, that portion of the Infrastructure Improvements that is subject to such continuing deficiencies. Regardless of whether the applicable warranty period has expired, the Developer agrees to repair any damage to the Infrastructure Improvements caused by Developer's construction activities on the Property. Nothing contained herein shall prevent the Town or Developer from seeking recourse against any other third party for damage to the Infrastructure Improvements caused by such third party.

6. Default. If either Party fails to perform any obligation, and such Party fails to cure its nonperformance within 30 days after notice of nonperformance is given by the non-defaulting Party, such Party will be in default. In the event of such default, the non-defaulting Party may terminate this Agreement and will have all remedies that are available to it at law or in equity including, without limitation, the remedy of specific performance. If the nature of the defaulting Party's nonperformance is such that it cannot reasonably be cured within 30 days, then the defaulting Party will have such additional periods of time as may be reasonably necessary under the circumstances, provided the defaulting Party immediately commences to cure its nonperformance and thereafter diligently continues to completion the cure of its nonperformance. In no event shall any such cure period exceed 60 days.

7. General.

7.1 Notices and Requests. Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if (A) delivered to the party at the address set forth below, (B) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below or (C) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to the Town: Town of Fountain Hills
 16705 East Avenue of the Fountains
 Fountain Hills, Arizona 85268
 Attn: Kenneth W. Buchanan, Town Manager

With copy to: GUST ROSENFELD, P.L.C.
 One East Washington Street, Suite 1600
 Phoenix, Arizona 85004-2553
 Attn: Andrew J. McGuire, Esq.

If to Developer: Fountain Hills Development Group, LLC
 155 W. New York Ave, Suite 200
 Southern Pines, North Carolina 28387
 Attn: Linda Suydam

Post Development Group, LLC
155 W. New York Ave, Suite 200
Southern Pines, North Carolina 28387
Attn: Linda Suydam

or at such other address, and to the attention of such other person or officer, as any party may designate in writing by notice duly given pursuant to this Subsection. Notices shall be deemed received (A) when delivered to the party, (B) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage or (C) the following business day after being given to a recognized overnight delivery service, with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a party shall mean and refer to the date on which the party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

7.2 Amendment. No amendment or waiver of any provision in this Agreement will be binding (A) on the Town unless and until it has been approved by the Town Council and has become effective or (B) on Developer unless and until it has been executed by an authorized representative.

7.3 Headings; References. The headings of this Agreement are for purposes of reference only and shall not limit or define the meaning of any provision of this Agreement. Any references in this Agreement to a "section" or a "subsection" shall include all subsections and paragraphs thereof.

7.4 Time of the Essence. Time is of the essence with regard to performance under the terms and provisions of this Agreement, and any amendment, modification or revision thereof, with respect to the actions and obligations of each person bound by the terms hereof.

7.5 Attorney's Fees. If either Party commences an action against the other to interpret or enforce any of the terms of this Agreement or because of the breach by the other Party of any of the terms hereof, the losing Party shall pay to the prevailing Party reasonable attorney's fees, costs and expenses, including expert witness fees, incurred in connection with the prosecution or defense of such action. For the purpose of this Agreement, the terms "attorney's fees, costs and expenses" shall mean the fees and expenses of counsel to the Parties hereto, which may include printing, duplicating and other expenses, air freight charges, and fees billed for law clerks, paralegals, librarians and others not admitted to the bar but performing services under the supervision of an attorney. The term "attorneys' fees, costs and expenses" shall also include, without limitation, all such fees and expenses incurred with respect to appeals, arbitrations and bankruptcy proceedings, and whether or not any action or proceeding is brought with respect to the matter for which said fees and expenses were incurred.

7.6 Recordation. This Agreement shall be recorded in its entirety by the Town in the Maricopa County Recorder's Office not later than 10 days after it is fully executed by the Developer and the Town.

7.7 Choice of Law; Venue. The laws of the State of Arizona shall govern any dispute, controversy, claim or cause of action arising out of or related to this Agreement. The venue for any such dispute shall be Maricopa County, Arizona, and each Party waives the right to object to venue in Maricopa County for any reason.

7.8 Assignment. The provisions of this Agreement are binding upon and shall inure to the benefit of the Parties, and all of their successors in interest and assigns. Notwithstanding anything to the contrary contained herein, upon the sale of the Project to a bona fide third party purchaser, Fountain Hills Development Group, LLC shall automatically be deleted and released from this Agreement, and shall have no further rights, obligations or responsibilities hereunder, and Post Development Group, LLC, a North Carolina limited liability company, shall be deemed the Developer as defined herein.

7.9 Third Parties. No term or provision of this Agreement is intended to, or shall be for the benefit of any person or entity not a Party hereto, and no such other person or entity shall have any right or cause of action hereunder.

7.10 No Partnership. None of the terms or provisions of this Agreement shall be deemed to create a partnership between or among the Parties hereto in their respective businesses or otherwise, nor shall it cause them to be considered members of a joint venture or joint enterprise. Each Party hereto shall be considered a separate owner, and no Party hereto shall have the right to act as an agent for another Party hereto, unless expressly authorized to do so herein or by separate written instrument signed by the Party to be charged.

7.11 Waiver. No delay in exercising any right or remedy shall constitute a waiver thereof, and no waiver of any breach shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant, or condition of this Agreement. No waiver shall be effective unless it is in writing and is signed by the Party asserted to have granted such waiver.

7.12 Further Documentation. The Parties agree in good faith to execute such further or additional instruments and documents and to take such further acts as may be necessary or appropriate to fully carry out the intent and purpose of this Agreement.

7.13 Fair Interpretation. The Parties have been represented by counsel in the negotiation and drafting of this Agreement and this Agreement shall be construed according to the fair meaning of its language. The rule of construction that ambiguities shall be resolved against the Party who drafted a provision shall not be employed in interpreting this Agreement.

7.14 Counterparts. This Agreement may be executed in counterparts, each of which shall be an original but all of which shall constitute one and the same instrument.

7.15 Computation of Time. In computing any period of time under this Agreement, the date of the act or event from which the designated period of time begins to run shall not be included. The last date of the period so completed shall be included unless it is a Saturday, Sunday or legal holiday, in which event the period shall run until the end of the next day which is not a Saturday, Sunday or legal holiday. The time for performance of any obligation or taking any action under this Agreement shall be deemed to expire at 5:00 p.m. local time, (Phoenix, Arizona) on the last day of the applicable time period provided herein.

7.16 Conflict of Interest. Pursuant to ARIZ. REV. STAT. § 38-503 and § 38-511, no member, official or employee of the Town shall have any personal interest, direct or indirect, in this Agreement, nor shall any such member, official or employee participate in any decision relating to this Agreement which affects his or her personal interest or the interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested. This Agreement is subject to cancellation pursuant to the terms of ARIZ. REV. STAT. § 38-511.

7.17 Severability. Every provision of this Agreement is and will be construed to be a separate and independent covenant. If any provision in this Agreement or the application of the same is, to any extent, found to be invalid or unenforceable, the remainder of this Agreement or the application of that provision to circumstances other than those to which it is invalid or unenforceable will not be affected by that invalidity or unenforceability. Each provision in this Agreement will be valid and will be enforced to the extent permitted by law and the Parties will negotiate in good faith for such amendments of this Agreement as may be necessary to achieve its intent, notwithstanding such invalidity or unenforceability.

7.18 Covenant of Good Faith. In exercising their rights and in performing their obligations pursuant to this Agreement, the Parties will cooperate with one another in good faith to ensure the intent of this Agreement can be attained.

7.19 Records and Audit Rights. To ensure that the Developer and its subcontractors are complying with the warranty under Subsection 7.20 below, the Developer's and its subcontractors' books, records, correspondence, accounting procedures and practices, and any other supporting evidence relating to this Agreement, including the papers of any contractor and its subcontractors' employees who perform any work or services pursuant to this Agreement (all of the foregoing hereinafter referred to as "Records"), shall be open to reasonable inspection and subject to audit and/or reproduction during normal working hours by the Town, to the extent necessary to adequately permit (A) evaluation and verification of any invoices, payments or claims based on the Developer's and its subcontractors' actual costs (including direct and indirect costs and overhead allocations) incurred, or units expended directly in the performance of work under this Agreement and (B) evaluation of the Developer's and its subcontractors' compliance with the Arizona employer sanctions laws referenced in Subsection 7.20 below. To the extent necessary for the Town to audit Records as set forth in this Subsection, the Developer and its subcontractors hereby waive any rights to keep such Records confidential. For the purpose of evaluating or verifying such actual or claimed costs or units expended, the Town shall have reasonable access to said Records, even if located at its subcontractors' facilities, from the effective date of this Agreement for the duration of the work and until three years after the date of final payment by the Town to the Developer pursuant to this Agreement. The Developer and

its subcontractors shall provide the Town with adequate and appropriate workspace so that the Town can conduct audits in compliance with the provisions of this Subsection. The Town shall give the Developer or its subcontractors reasonable advance notice of intended audits. The Developer shall require its subcontractors to comply with the provisions of this Subsection by insertion of the requirements hereof in any subcontract pursuant to this Agreement.

7.20 E-verify Requirements. To the extent applicable under ARIZ. REV. STAT. § 41-4401, the Developer and its subcontractors warrant compliance with all federal immigration laws and regulations that relate to their employees and their compliance with the E-verify requirements under ARIZ. REV. STAT. § 23-214(A). The Developer's or its subcontractor's failure to comply with such warranty shall be deemed a material breach of this Agreement and may result in the termination of this Agreement by the Town.

[SIGNATURES ON FOLLOW PAGES]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first set forth above.

“Town”

TOWN OF FOUNTAIN HILLS,
an Arizona municipal corporation


Kenneth W. Buchanan, Town Manager

ATTEST:


Bevelyn J. Bender, Town Clerk


(ACKNOWLEDGMENT)

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

On Sept. 19, 2014, before me personally appeared Kenneth W. Buchanan, the Town Manager of the TOWN OF FOUNTAIN HILLS, an Arizona municipal corporation, whose identity was proven to me on the basis of satisfactory evidence to be the person who he claims to be, and acknowledged that he signed the above document, on behalf of the Town of Fountain Hills.



(Affix notary seal here)


Notary Public

[SIGNATURES CONTINUE ON FOLLOWING PAGE]

“Developer”

FOUNTAIN HILLS DEVELOPMENT GROUP, LLC,
a North Carolina limited liability company

By: William C. Roratter

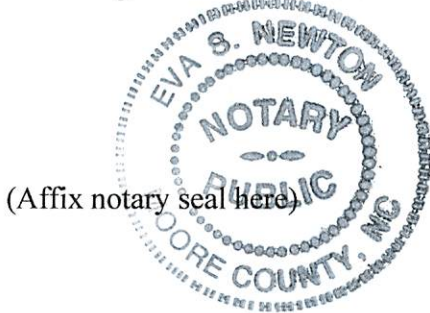
Name: William C. Roratter

Title: Manager

(ACKNOWLEDGMENT)

STATE OF North Carolina)
) ss.
COUNTY OF Moore)

On September 10, 2014, before me personally appeared William C. Roratter, the Manager of Fountain Hills Development Group, LLC, a North Carolina limited liability company, whose identity was proven to me on the basis of satisfactory evidence to be the person who he/she claims to be, and acknowledged that he/she signed the above document on behalf of the company.



Eva S. Newton
Notary Public
My Commission Expires: July 19, 2019

POST DEVELOPMENT GROUP, LLC
a North Carolina limited liability company

By: William C. Ronalter

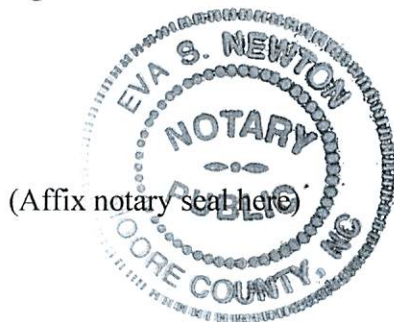
Name: William C. Ronalter

Title: Manager

(ACKNOWLEDGMENT)

STATE OF North Carolina)
COUNTY OF Moore) ss.

On September 10, 2014, before me personally appeared William C. Ronalter, the Manager of Post Development Group, LLC, a North Carolina limited liability company, whose identity was proven to me on the basis of satisfactory evidence to be the person who he/she claims to be, and acknowledged that he/she signed the above document on behalf of the company.



Eva S. Newton
Notary Public
my Commission Expires: July 19, 2019

EXHIBIT A
TO
DEVELOPMENT AGREEMENT
BETWEEN THE
TOWN OF FOUNTAIN HILLS AND
FOUNTAIN HILLS DEVELOPMENT GROUP, LLC

[Project Narrative]

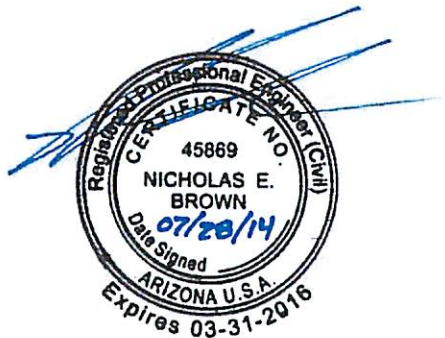
See following pages.

PROJECT NARRATIVE REPORT
for
TSC FOUNTAIN HILLS
17130 E. SHEA BLVD.

Prepared for:

FOUNTAIN HILLS DEVELOPMENT GROUP, LLC
155 W. NEW YORK AVENUE
SOUTHERN PINES, NC 28387

July 28, 2014



12409 W. Indian School Rd. C303, Avondale, AZ 85392

Phone (623)-536-1993



TSC-FOUNTAIN HILLS

July 28, 2014

DESCRIPTION OF PROPOSAL

The proposed development consists of one new retail building, 21,702 s.f.±, and an associated hay barn building, 1,250 s.f.±, on a 4.02 acre (±) parcel (net area) that sits on a portion of Parcel A of “Replat of Lots 1 and 2 of Fountain Hills Final Plat 705” (Bk.468, Pg.3, MCR) and is located at the northeast corner of Shea Boulevard and Monterey Drive. The proposed improvements are not phased.

The proposed development is a new retail building, Tractor Supply Company (TSC), with associated site improvements. The TSC is a large retail store chain that offers products for home improvement, agriculture, lawn and garden, clothing, and livestock, equine and pet care. Stores supply the unique products to support their customer’s rural lifestyle, from welders and generators to animal care products and men and women’s workwear. Standard hours of operation are Monday through Sunday 7am-8pm.

TSC stores are primarily located in rural areas and outlying suburbs of major cities. This proposed Tractor Supply store has 17,709 square feet of inside retail space with 23,761 square feet of stockroom and outside space used to display agricultural fencing, livestock equipment and horse stalls.

RELATIONSHIP TO SURROUNDING PROPERTY

The proposed development expects to have a positive impact on the surrounding area and neighborhood. TSC will provide products and services to support a rural lifestyle matching the surrounding developments. The standard hours of operation are reasonable considering the neighboring residential area, as they open and close at practical times. Loud operations or noises are not typical for TSC stores. TSC fits the intended zoning of C-2 with slight modifications through a Development Agreement with the Town of Fountain Hills, including but not limited to adjusted parking calculations, outdoor display areas and adjusted detention volume requirements.



TSC-FOUNTAIN HILLS

July 28, 2014

PROPOSED DEVELOPMENT STANDARDS

The parcel is currently zoned C-2, Intermediate Commercial Zoning. TSC stores meet the retail type uses stated in the Town's C-2 zoning description. The following are standards for C-2 zoning and Development Agreement requests, and how they relate to the planning and design of the development:

<i>Applicable Requirement</i>	<i>Response</i>
Minimum Lot Area - 6,000 sf	Will comply
Minimum Lot Width - 60 lf	Will comply
Minimum Building Height – 40 ft	Will comply
Minimum Yard Setbacks	
Front – 10 ft	Will comply
Side – 25 ft (Adjacent Residential)	Will comply
Street Side – 0 ft	Will comply
Rear – 10 ft	Will comply
Maximum Lot Coverage – 60%	Will comply
Outdoor Display – Subject to Special Use Permits	Outdoor display proposed and addressed with Town by Development Agreement
Outdoor Lighting to be in conformance with Town provisions. Lighting shall be placed to reflect away from residential zoning.	Will comply
Outdoor use of a commercial nature adjacent to residential zone boundary shall be screened by 8 ft wall.	Will comply
Required Parking Ratios	
Retail – 1/250 sf	Development Agreement to allow parking ratio for retail – 1/300 sf
Outdoor Display/Stockroom (Warehouse) – 1/800 sf	Development Agreement to allow parking ratio for warehouse – 1/900 sf
Required Retention/Detention Volume	
Greater of Pre. vs. Post OR First Flush	Development Agreement to allow minor reduction of required volume to 8,000 cf

ARCHITECTURAL DESIGN GUIDELINES

The exterior of the building is constructed in Split face C.M.U. painted in neutral colors Sanderling (LRV 31%) to 4'-0" and at Pilasters and Urban Putty (LRV 54%) from 4'-0" to top of E.I.F.S. Cornice. There are Pilasters on the building corners and at control joint locations along the sides of the building with decorative E.I.F.S. cornice at the top of each wall. The Parapets are extended above the roof line to screen the Roof Top Units from pedestrian view all the way around the building. Scuppers will be installed with downspouts on the rear of the building to drain water from the roof. The roof will be a T.P.O. Membrane Roof. There is an



TSC-FOUNTAIN HILLS

July 28, 2014

exterior vestibule that is enclosed with an E.I.F.S structure and Gabled Standing Seam Metal Roof (Colonial Red) above the vestibule with Split Face C.M.U. columns at the entrance corners.

Added architectural elements include 4'-0" deep awnings w/ standing Seam Metal Roof (Colonial Red), Faux Barn Shutters, and decorative Gooseneck Light fixtures (front elevation only). The wall pack light fixtures on the side and rear of the building will be LED fixtures that are Dark Sky compliant.

The Fenced Outdoor Display Area will have a Black Aluminum Tube Fence surrounding the merchandise to be displayed in that area. Additional Screen Wall has been added to the rear of the building to screen loading area from street view as well as a dumpster enclosure to hide dumpsters from public view.

LANDSCAPING STRATEGY & DESIGN

The proposed landscape for the Tractor Supply Company store will be a reflection of the natural desert environment that enriches the image of the Fountain Hills community. This will be achieved by utilizing on-site salvage material and through the integration of indigenous plant species that blend seamlessly with the abutting Cereus Wash. To further preserve the integrity of the property, all of the existing saguaro cacti currently located on the site will be salvaged and thoughtfully relocated to enhance entry focal points and new native plant groupings. The overall landscape will complement the architecture of the building as well as the neighboring surroundings.

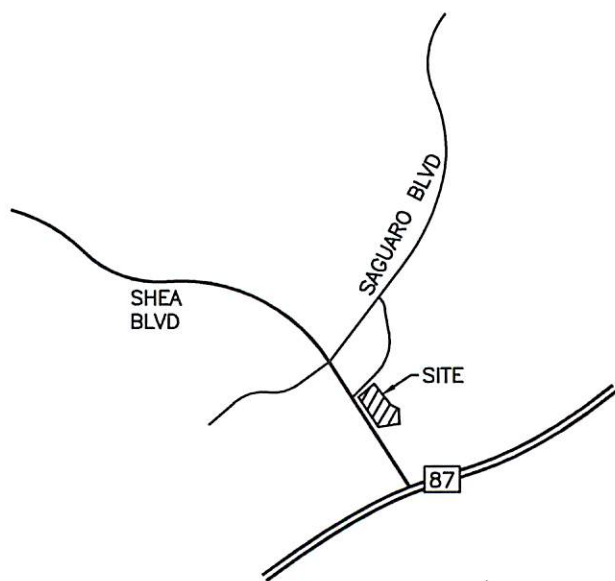
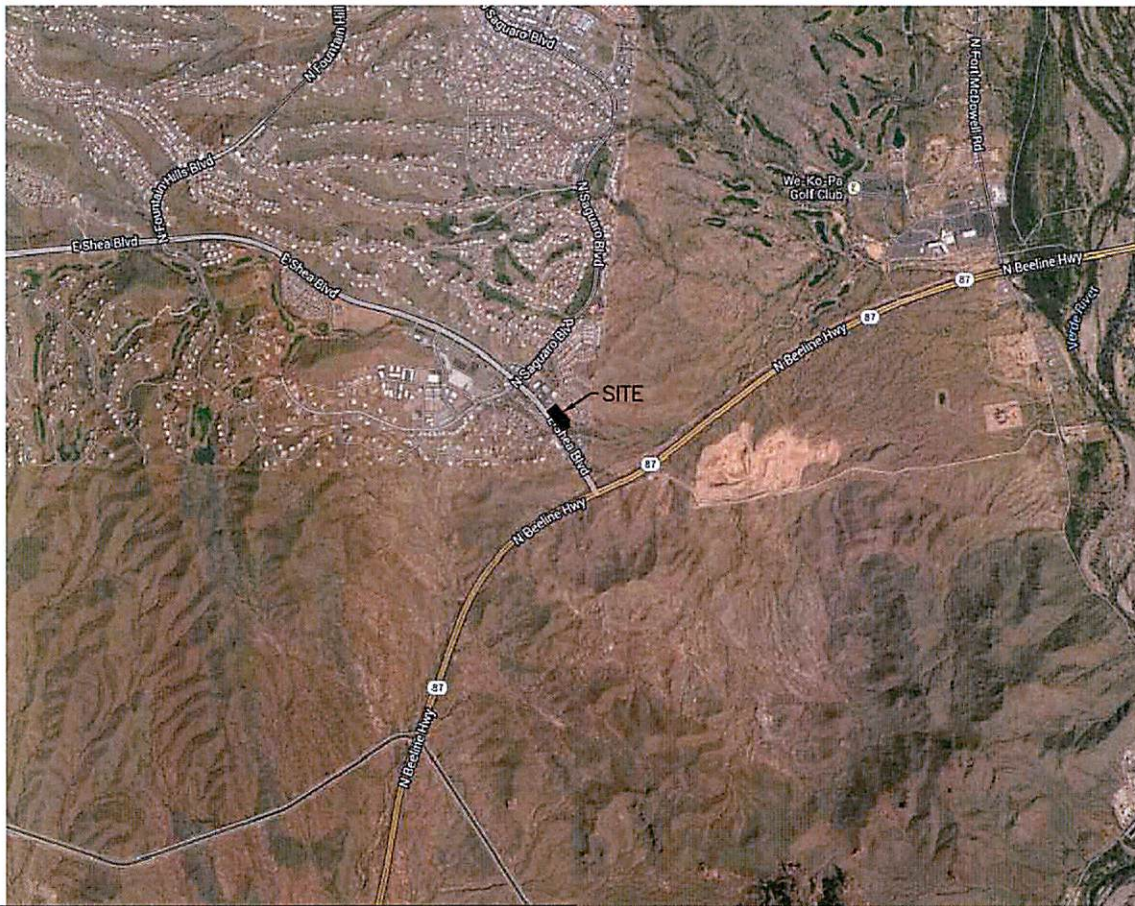


TSC-FOUNTAIN HILLS

July 28, 2014

APPENDIX A

1. VICINITY MAP
2. AERIAL PHOTO
3. LEGAL DESCRIPTION



VICINITY MAP

SCALE: N.T.S. SEC. 26, T.3N., R.6E.



12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993

VICINITY MAP

PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029



**12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993**

AERIAL PHOTO
PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029

LEGAL DESCRIPTION

PARCEL A, OF REPLAT OF LOTS 1 AND 2 OF FOUNTAIN HILLS
FINAL PLAT 705, ACCORDING TO THE PLAT OF RECORD IN THE
OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY,
ARIZONA, IN BOOK 468 OF MAPS, PAGE 3.



**12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993**

LEGAL DESCRIPTION
PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029

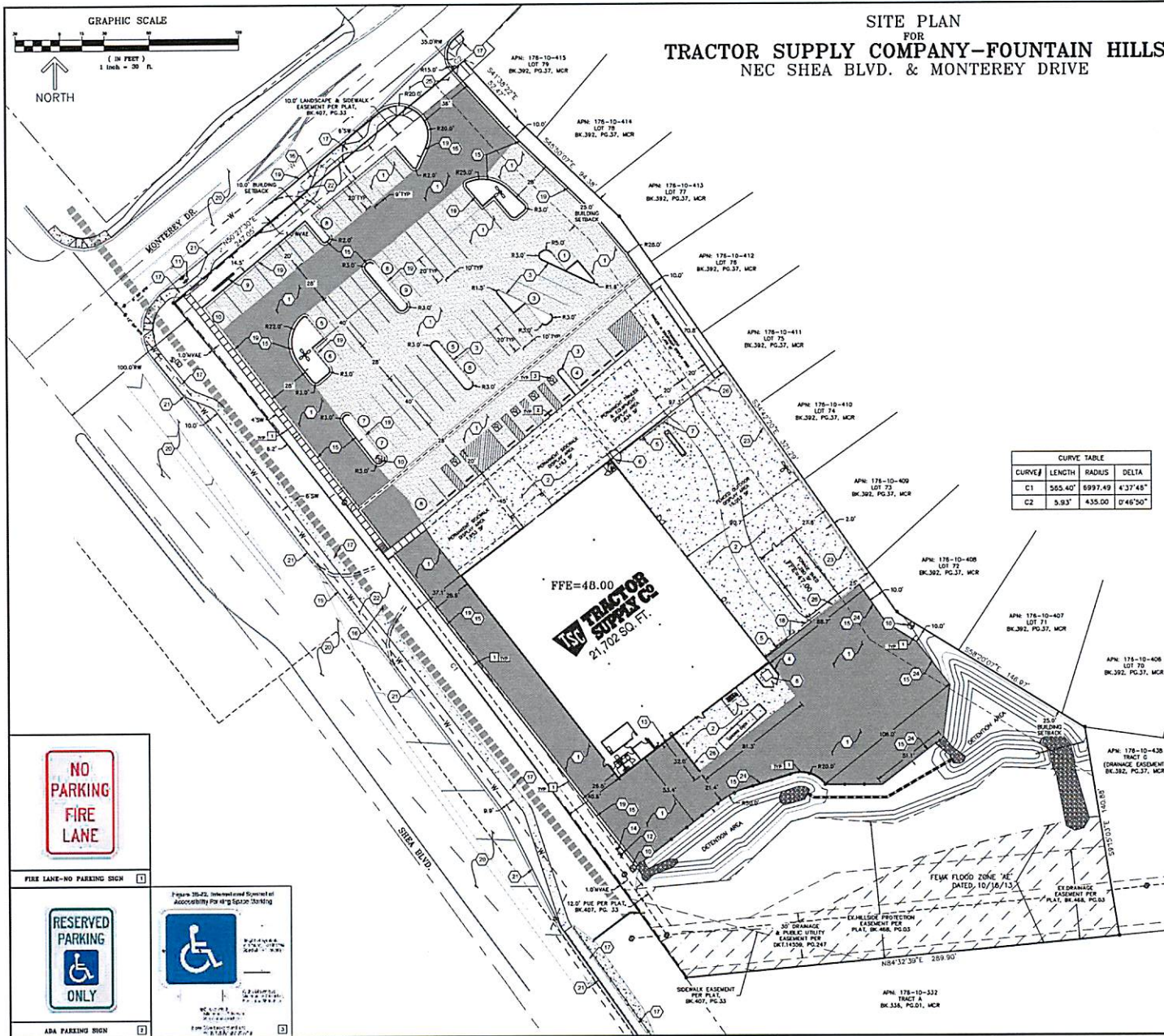


TSC-FOUNTAIN HILLS

July 28, 2014

APPENDIX B

1. SITE PLAN
2. DISPLAY AREA EXHIBIT
3. STORE FRONT PHOTO



DEVELOPER
FOUNTAIN HILLS DEV. GROUP, LLC
155 N. NEW YORK AVENUE
SOUTHERN PHOENIX, AZ 85040
CONTACT: JAMIE MEHA

ENGINEER
JES. INC.
12800 W. BOWEN SCHOOL RD.
SUITE # C-303
MCKINLEY, AZ 85302
CONTACT: MICHAEL BROWN, PE

TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS
NEC SHEA BLVD & MONTEREY DRIVE
SITE PLAN
17130 E. SHEA BLVD.
FOUNTAIN HILLS, MARICOPA COUNTY, AZ

DEVELOPMENT DATA
SITE INFORMATION
APN 178-10-799
NET AREA 174,937 S.F. (4.02 ACRES)
CURRENT ZONING C-2
PROPOSED ZONING DEVELOPMENT AGREEMENT
SETBACKS
FRONT 10'
REAR 10'
SIDE 25' (ADJ. RESIDENTIAL)
STREET SIDE 0'
MAXIMUM BUILDING HEIGHT 40'
MAXIMUM BUILDING COVERAGE 60%

LEGAL DESCRIPTION
PARCELS A, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z OF FOUNTAIN HILLS FINAL PLAT 700, ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, IN BOOK 468 OF MAPS, PAGE 3.

FEMA FLOOD INFORMATION
ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 04012C104H, DATED OCTOBER 18, 2013 THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO MAP, A PORTION WITHIN ZONE 'A1' THE REMAINDER WITHIN ZONE SHOWN 'X' ZONE 'A1' IS DESCRIBED AS 'THE SPECIAL FLOOD HAZARD AREA IS SUBJECT TO THE 100-YEAR FLOOD; BASE FLOOD ELEVATIONS DETERMINED; ZONE SHOWN 'X' IS DESCRIBED AS 'AREAS OF 100-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.'

BUILDING INFORMATION
BUILDING SIZE MAIN 21,702 S.F.
PORCHES SHED 1,250 S.F.
TOTAL 22,952 S.F.
PROPOSED BUILDING COVERAGE 13.1%
BUILDING CONSTRUCTION TYPE 1B-FIRE FLOW 3000gpm@30psi
LANDSCAPING AREA 53,379 S.F.
LANDSCAPING OPEN AREA 30,258

PARKING DATA
REQUIRED PARKING RATIO 1/300 S.F. (RETAIL)
1/800 S.F. (O.D. DISPLAY & STOCKROOM)
PARKING SPACES REQUIRED
RETAIL 17,709 S.F./300 S.F. = 59
O.D. DISPLAY/STOCKROOM 23,761 S.F./800 S.F. = 27
TOTAL 86
PARKING SPACES PROVIDED 87
ADA SPACES REQUIRED 5
ADA SPACES PROVIDED 5
LOADING SPACES REQUIRED 2
LOADING SPACES PROVIDED 4

KEYNOTES
1. NEW ASPHALT PAVEMENT
2. NEW CONCRETE PAVEMENT
3. NEW 6" VERTICAL CONCRETE CURB
4. NEW 6" CMU BLOCK SCREEN WALL
5. NEW 8" WROUGHT IRON FENCE
6. NEW 5' SPRING GATE
7. NEW 20' ROLLING GATE W/ FIRE DEPT. KNOX BOX
8. NEW TRASH ENCLOSURE
9. NEW FIRE HYDRANT
10. NEW FIRE HYDRANT
11. EXISTING FIRE HYDRANT
12. NEW REMOTE FIRE DEPARTMENT CONNECTION - 4" STORZ
13. NEW FIRE RISER LOCATION
14. NEW FIRE BACKFLOW PREVENTION DEVICE
15. FIRE LAKE - CURB LINE PAINTED FIRE ENGINE RED.
16. EXISTING DRIVEWAY ENTRANCE
17. NEW CONCRETE SIDEWALK
18. NEW 16" ROLLING GATE W/ FIRE DEPT. KNOX BOX
19. NEW CONCRETE CURB AND GUTTER
20. EXISTING ASPHALT PAVEMENT
21. EXISTING CONCRETE CURB AND GUTTER
22. DEAD END REMOVE EXISTING DRIVEWAY ENTRANCE
23. NEW 8" CMU BLOCK SCREEN WALL/2' RETAINING WALL COMBO.
24. NEW RETAINING WALL VARYING HEIGHT 1'-1.5', HORIZONTAL IN LOCATIONS WHERE HEIGHT OF WALL EXCEEDS 50".
25. NEW DRIVEWAY ENTRANCE
26. NEW 8" CMU BLOCK SCREEN WALL

LEGEND
FOUND MONUMENT AS NOTED
SET BACK AT PROPERTY CORNER
ACCESSORIES PARCELS, HAZARDS
FOUND
DRAINAGE EASEMENT
SIDEWALK EASEMENT
PUBLIC UTILITY EASEMENT
NATURAL EASEMENT
TELEPHONE WAREHOUSE
ELECTRICAL TRANSFORMER
UNDERGROUND MONITORING WELL
SANITARY SINKER WAREHOUSE
UNDERGROUND TREE
PAVED VERGE TREE
SAGUARO CACTUS
CONCRETE PAVEMENT
ASPHALT PAVEMENT-TRUCK TRAFFIC
ASPHALT PAVEMENT-PASSENGER CAR
EASEMENT LINE AS NOTED
PROPERTY LINE
ROOT OF WAY
CENTERLINE OF ROAD
SETBACK LINE AS NOTED
1' ELEVATION CONTOUR INTERNAL
100 YEAR FLOODPLAIN PER FEMA MAP
WATERLINE PER RECORD DMS
SEWERLINE PER RECORD DMS
UNDERGROUND ELECTRIC LINE
UNDERGROUND GAS LINE
WARRANTY SCREEN WALL
EOD CABLE PERIODIC
EOD CABLE PERIODIC
WATER VALVE
FIRE HYDRANT
SPOT ELEVATION

PO BOX 2368
GLENDALE, AZ 85311
PH (602) 334-1173

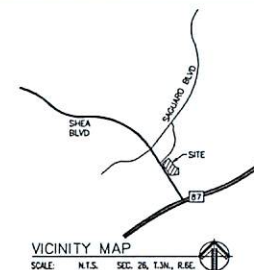
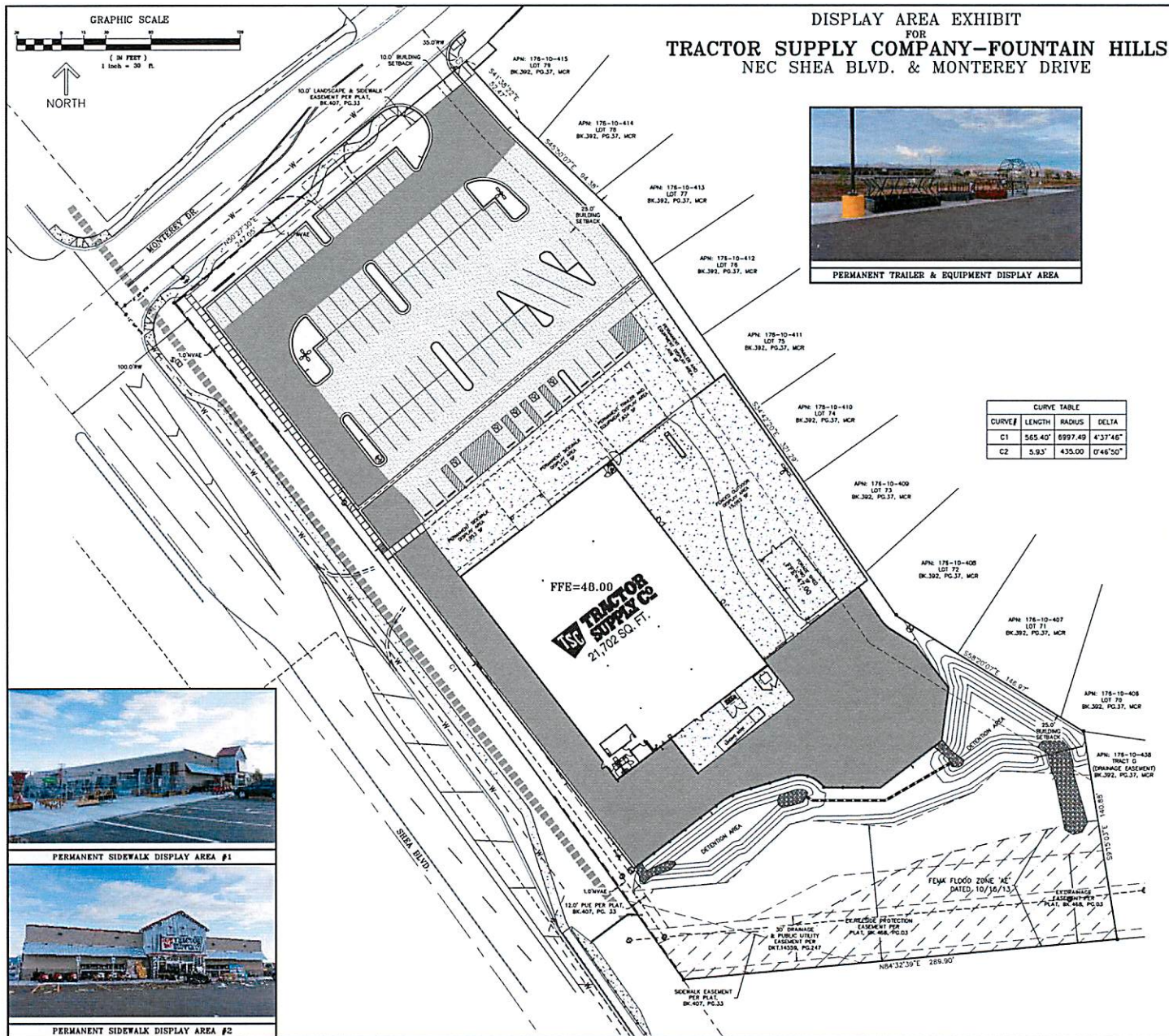
866

866

866

866

86



DEVELOPMENT DATA

SITE INFORMATION

APN	178-10-799
NET AREA	174,937 S.F. (4.02 ACRES)
ZONING	C-2
SETBACKS	FRONT 10'
	REAR 10'
	SIDE 25' (ADJ. RESIDENTIAL)
	STREET SIDE 0'
MAXIMUM BUILDING HEIGHT	40'
MAXIMUM BUILDING COVERAGE	60%



DEVELOPER
FOUNTAIN HILLS DEV. GROUP, LLC
150 W. NEW YORK AVENUE
SOUTHERN PINES, NC 28387
CONTACT: GAVIN MEIER

ENGINEER
CEG, INC.
12429 W. BOWEN SCHOOL RD.
SUITE 100-303
ARROYO, AZ 85302
CONTACT: MICHAEL BROWN, PE

TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS
NEC SHEA BLVD & MONTEREY DRIVE
DISPLAY AREA EXHIBIT
17130 E. SHEA BLVD.
FOUNTAIN HILLS, MARICOPA COUNTY, AZ

DRAWN BY: NEB
CHECKED BY: NEB
DATE: 06/25/14
SCALE: 1"=30'
PROJECT #: 14-029
LAST MODIFIED BY:

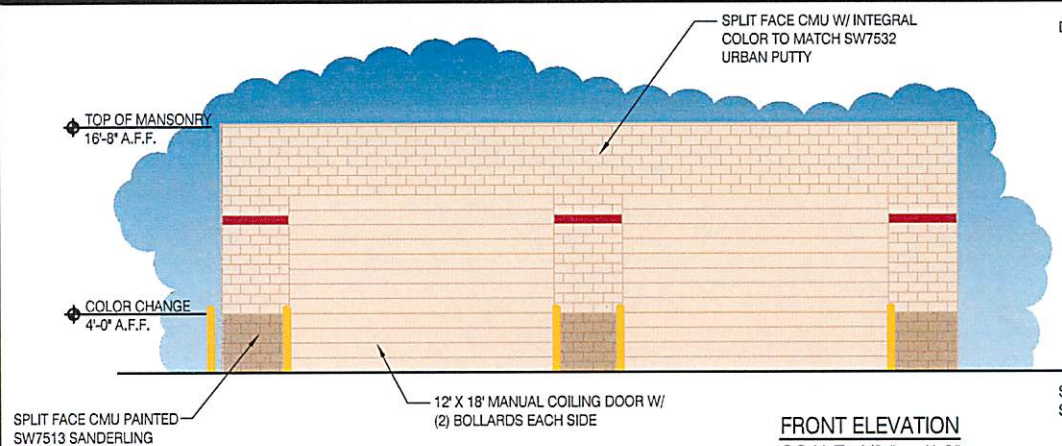
PO BOX 2368
GLENDALE, AZ 85311
PH: (602) 334-1913

866

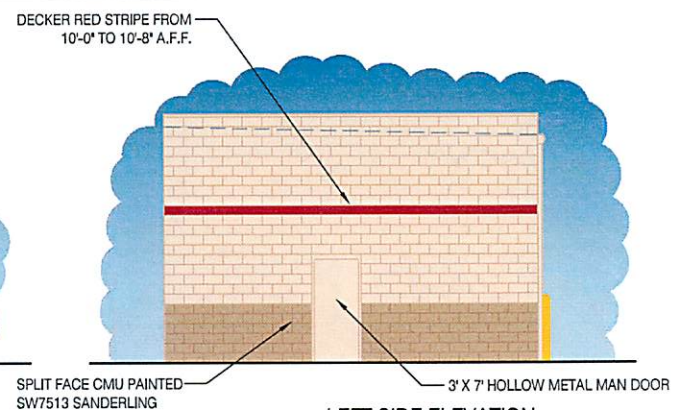
4000 MICHAEL E. BROWN
REGISTERED PROFESSIONAL ENGINEER
NO. 12345

SHEET 1 OF 1
UP1.01

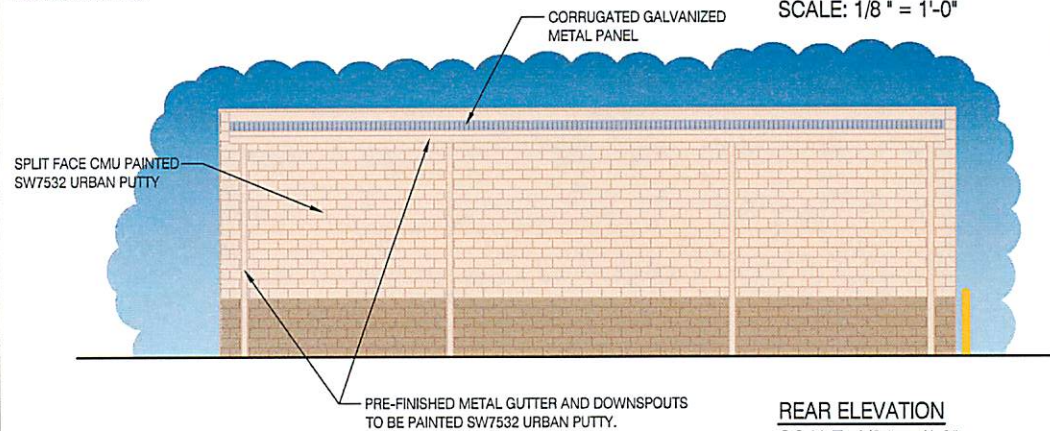
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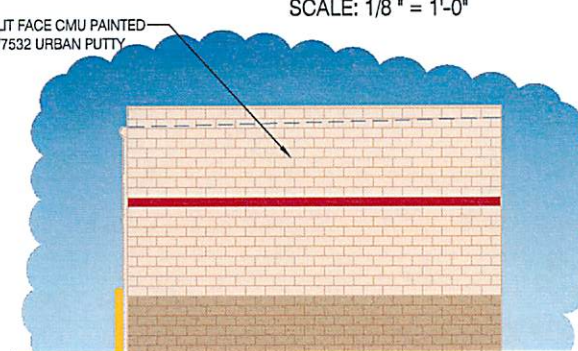
FRONT ELEVATION
SCALE: 1/8" = 1'-0"



LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



**OXFORD
ARCHITECTURE**

TRACTOR SUPPLY COMPANY - FOUNTAIN HILLS, AZ FORAGE SHED - 09.03.2014

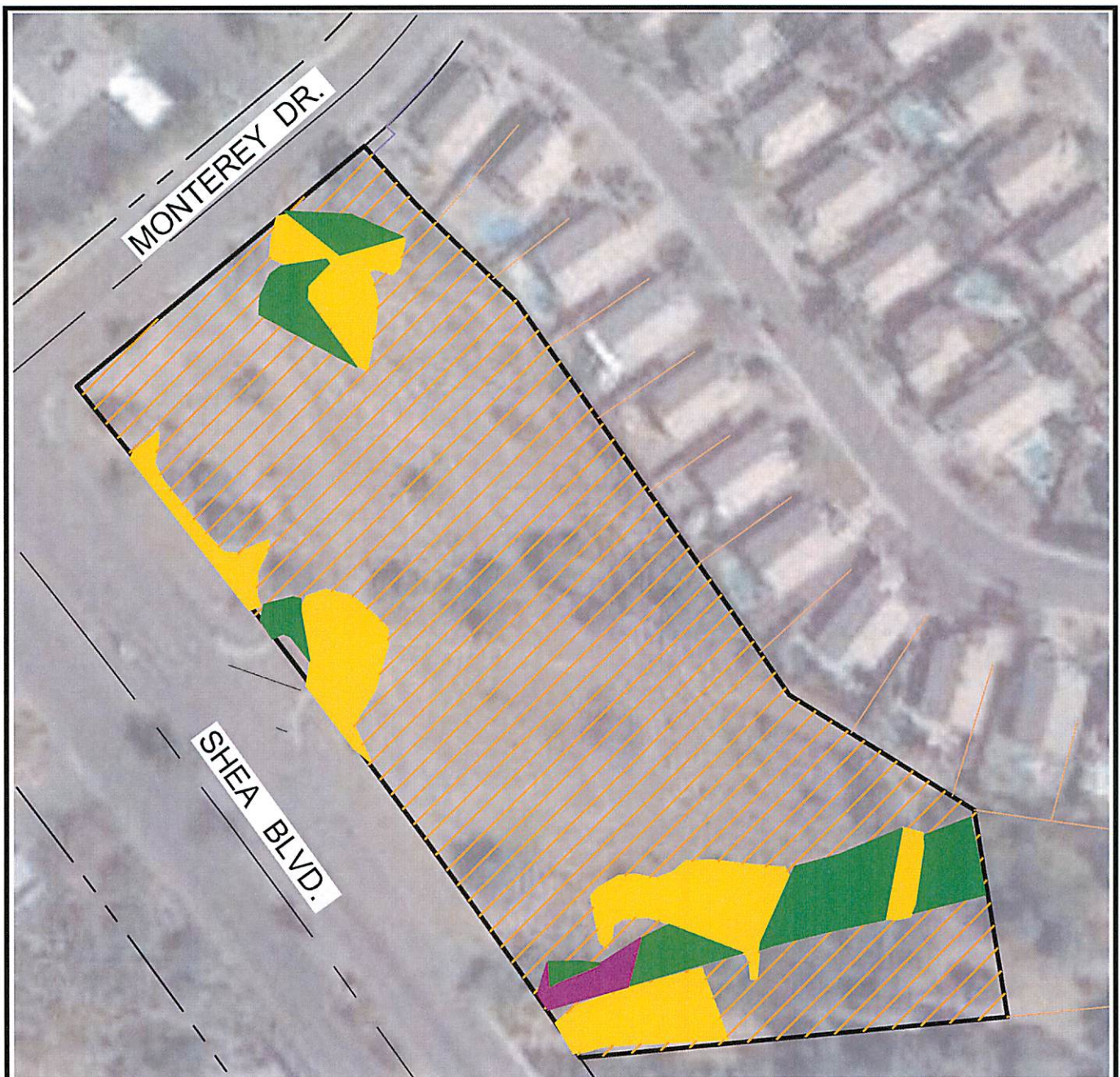
1205 Paris Avenue
Suite 205
Nashville, TN 37212

Architecture
Planning
Interior Architecture

EXHIBIT B
TO
DEVELOPMENT AGREEMENT
BETWEEN THE
TOWN OF FOUNTAIN HILLS AND
FOUNTAIN HILLS DEVELOPMENT GROUP, LLC

[Hillside Disturbance Exemption]

See following pages.



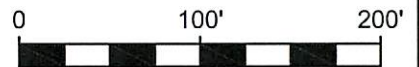
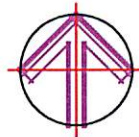
LEGEND:

SLOPES 0% - 10%
 SLOPES 10% - 20%
 SLOPES 20% - 30%
 SLOPES > 30%



AREA:

144,121 S.F. (3.309 AC)
 20,131 S.F. (0.462 AC)
 9,421 S.F. (0.216 AC)
 1,264 S.F. (0.029 AC)



12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993

SLOPE ANALYSIS

PROJECT: TSC FOUNTAIN HILLS
 CEG# 14-029

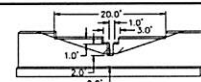
EXHIBIT C
TO
DEVELOPMENT AGREEMENT
BETWEEN THE
TOWN OF FOUNTAIN HILLS AND
FOUNTAIN HILLS DEVELOPMENT GROUP, LLC

[Preliminary Grading and Drainage Plan]

See following pages.

PRELIMINARY GRADING & DRAINAGE PLAN FOR TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS NEC SHEA BLVD. & MONTEREY DRIVE

SITE INFORMATION	
APN	176-10-799
NET AREA	174,937 S.F. (4.02 ACRES)
ZONING	C-2
SETBACKS	FRONT 10' REAR 10' SIDE 25' (ADJ. RESIDENTIAL)
MAXIMUM BUILDING HEIGHT	40'
MAXIMUM BUILDING COVERAGE	50%



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	565.40'	6997.49'	4°37'48"
C2	5.93'	435.00'	0°46'50"



DEVELOPMENT DATA

PARCEL A, OF REPEAT OF LOTS 1 AND 2 OF FOUNTAIN HILLS FINAL PLAT 705, ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, IN BOOK 458 OF MAPS, PAGE 3.

FEMA FLOOD INFORMATION

ACCORDING TO FIRM FLOOD INSURANCE RATE MAP NO. 04013C1804L DATED OCTOBER 18, 2013 THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO MAP. A PORTION WITHIN ZONE 'AE' THE REMAINDER WITHIN ZONE SHADDED 'X'. ZONE 'AE' IS DESCRIBED AS THE SPECIAL FLOOD HAZARD AREA IS SUBJECT TO THE 100-YEAR FLOOD. BASE FLOOD ELEVATIONS DETERMINED 'X' IS DESCRIBED AS 'AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.'

DETENTION CALCULATIONS

AN EXISTING WASH RUNS THROUGH THE PROPERTY TO THE SOUTH OF THE PROPOSED BUILDING WITH A HILLSIDE PROTECTION EASEMENT A DETENTION BASIN WILL BE CONSTRUCTED JUST OUTSIDE OF THE EASEMENT WITH A WEIR OVERFLOW INTO THE EXISTING WASH TO REGULATE PRE VS POST FLOWRATES.

VOLUME REQUIRED

PER DEVELOPMENT AGREEMENT: V=8,000 CF

VOLUME PROVIDED

BASIN #1 V=5,582 CF

BASIN #2 V=3,244 CF

VOLUME PROVIDED V=8,826 CF

SITE FLOWS

AREA A=3.44 AC

TIME OF CONCENTRATION Tc=5.0 MIN

INTENSITY I=4.5 IN/HR

PRE COEFFICIENT C=0.49

PRE FLOWRATE Qpre=20.18 cfs

POST FLOWRATE FACTORS IN DETENTION BASIN & WEIR STRUCTURE

C=0.95

POST FLOWRATE Qpost=20.13 cfs

KEYNOTES

1. NEW ASPHALT PAVEMENT
2. NEW CONCRETE PAVEMENT
3. NEW 8" VERTICAL CONCRETE CURB
4. NEW 8" VERTICAL CONCRETE CURB AND GUTTER
5. NEW 3" WIDE CURB OPENING
6. NEW RIPRAP EROSION PROTECTION
7. NEW DETENTION BASIN, DEPTH AS NOTED, 3:1 SIDE SLOPES
8. NEW FIRE LINE
9. NEW FIRE HYDRANT
10. NEW BUCKTOW DEVICE WITH REMOTE F.D.C. - 4" STORZ
11. NEW WATER LINE SERVICE/METER (DOMESTIC)
12. NEW SINKER LINE
13. NEW VALLEY GUTTER
14. NEW SURFACE GRADE/BREAK
15. NEW WATER LINE SERVICE/METER (LANDSCAPING)
16. NEW SIDEWALK
17. EXISTING CONCRETE VERTICAL CURB & GUTTER
18. EXISTING DRIVEWAY ENTRANCE
19. NEW STORM DRAIN PIPE AT BASIN INVERTS
20. EXISTING FIRE HYDRANT
21. EXISTING 60" CUP STORM DRAIN PIPE
22. EXISTING DRIVEWAY ENTRANCE TO BE DEMOLISHED & REMOVED
23. EXISTING WASH
24. NEW CONCRETE WEIR STRUCTURE
25. NEW RIPRAP DETENTION BASIN SPILLWAY
26. NEW RETAINING WALL W/ HANDRAIL, HEIGHT VARIES (1'-5')
27. NEW HANDRAIL ON TOP OF RETAINING WALL
28. NEW 8" CMU BLOCK SCREEN WALL/2' RETAINING WALL COMBO.
29. NEW 8" WROUGHT IRON FENCE
30. NEW ROLLING GATE W/FIRE DEPARTMENT KNOX BOX
31. NEW SAFETY HANDRAIL ON EXISTING HEADWALL
32. NEW 8" CMU BLOCK SCREEN WALL

LEGEND

- FOUND MONUMENT AS NOTED
- SET BACK AS PROPERTY CENTERLINE
- W.C.R. MARICOPA COUNTY RECORDER
- ASSESSORS PARCEL NUMBER
- FOUND
- DRAINAGE EASEMENT
- SIDEWALK EASEMENT
- P.U.E. PARALLEL ELEVATION
- N.V.A.E. NO VEHICLE ACCESS EASEMENT
- TELEPHONE MANHOLE
- ELECTRICAL TRANSFORMER
- GRASSMETER MONITORING WELL
- SANITARY SINKER MANHOLE
- BRONZED TREE
- PAVED VEGE TREE
- SANITARY DUCTUS
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT-TRUCK TRAFFIC
- ASPHALT PAVEMENT-PASSENGER CAR
- EXISTENCE LINE AS NOTED
- PROPERTY LINE
- RIGHT OF WAY
- CENTERLINE OF ROAD
- SETBACK LINE AS NOTED
- 5' ELEVATION CONTOUR INTERNAL
- 1' ELEVATION CONTOUR INTERNAL
- 100 YEAR FLOODPLAIN PER FEMA MAP
- WATERLINE PER RECORDS DMS
- SEWERLINE PER RECORDS DMS
- UNDERGROUND ELECTRIC LINE
- COR COMMUNICATIONS LINE
- UNDERGROUND GAS LINE
- 5/8" CUP STORM DRAIN
- WASHTON SCREEN WALL
- CON CABLE PERIODIC
- CON CABLE WALK
- WATER VALVE
- FIRE HYDRANT
- SPOT ELEVATION

DEVELOPER	
FOUNTAIN HILLS DEV. GROUP, LLC 155 W. NEW YORK AVENUE SOUTHERN PINES, NC 28580 (910) 695-2694 CONTACT: GAVIN MEHA	
ENGINEER	
CEG, INC. 17420 N. NODAN SCHOOL RD. SUITE F C-303 AVONDALE, AZ 85326 CONTACT: NICHOLAS BROWN, PE	

TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS
NEC SHEA BLVD & MONTEREY DRIVE
PRELIMINARY GRADING & DRAINAGE PLAN
17130 E. SHEA BLVD.
FOUNTAIN HILLS, MARICOPA COUNTY, AZ

DRAWN BY:	NEB
CHECKED BY:	NEB
DATE:	07/26/14
SCALE:	1"=50'
PROJECT #:	14-029
LAST MODIFIED BY:	

PO BOX 3348
CLANDALE AZ 85311
CLANDALE AZ 85311
PH (602) 334-1991



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C0.01	

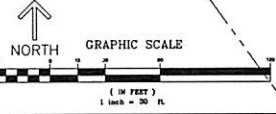
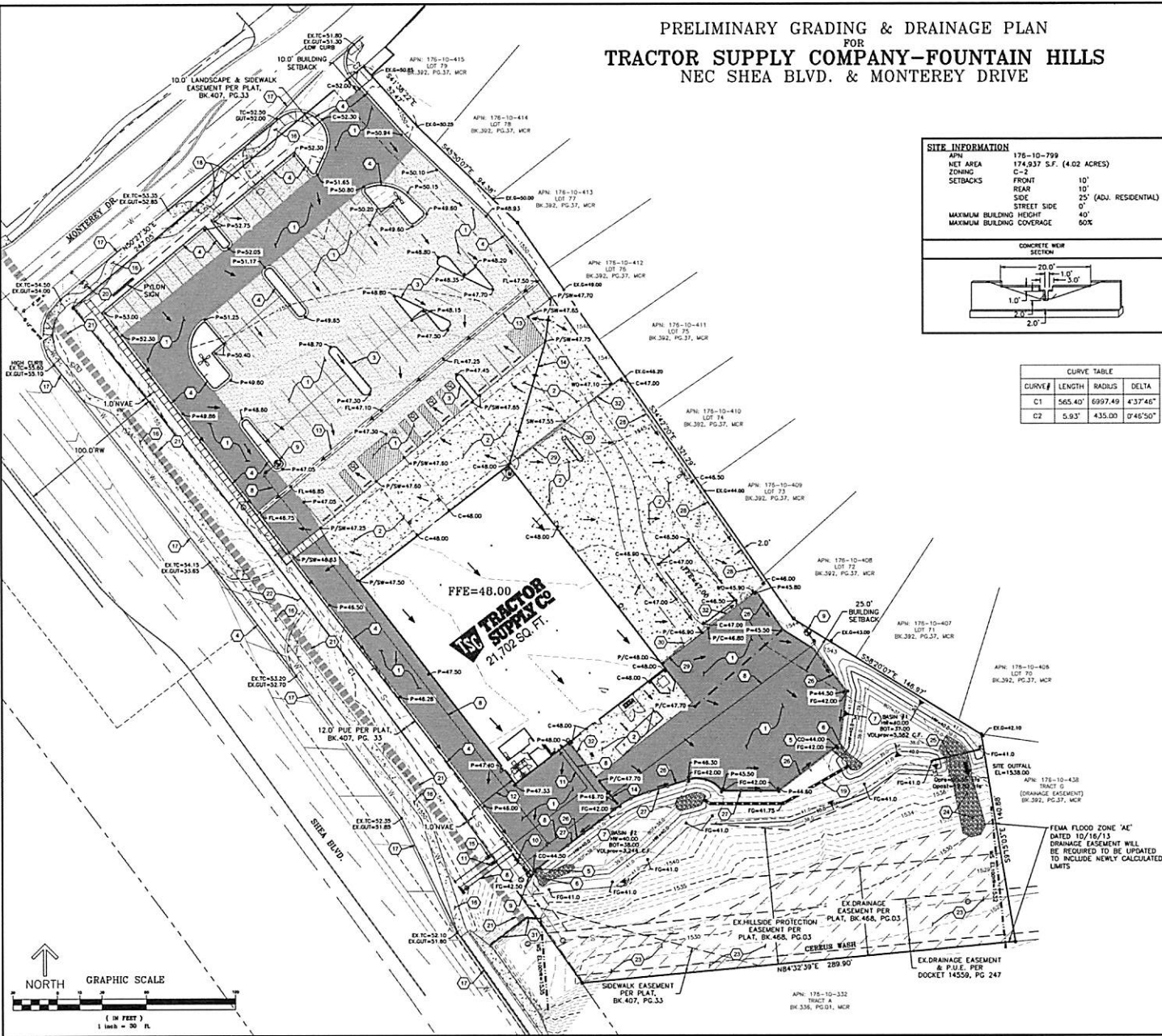


EXHIBIT D
TO
DEVELOPMENT AGREEMENT
BETWEEN THE
TOWN OF FOUNTAIN HILLS AND
FOUNTAIN HILLS DEVELOPMENT GROUP, LLC

[Drainage Report for TSC Fountain Hills]

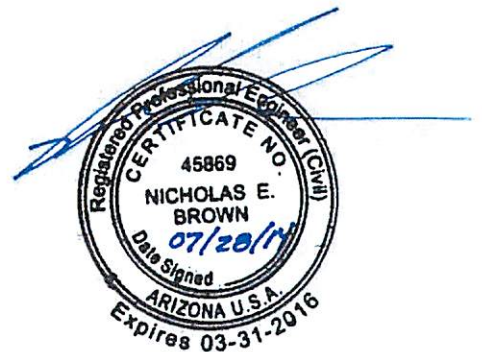
See following pages.

DRAINAGE REPORT
for
TSC FOUNTAIN HILLS
17130 E. SHEA BLVD.

Prepared for:

FOUNTAIN HILLS DEVELOPMENT GROUP, LLC
155 W. NEW YORK AVENUE
SOUTHERN PINES, NC 28387

July 28, 2014



12409 W. Indian School Rd. C303, Avondale, AZ 85392
Phone (623)-536-1993



TSC-FOUNTAIN HILLS

July 28, 2014

INTRODUCTION

The proposed development consists of one new retail building, 21,702 s.f.±, and a hay barn building, 1,250 s.f.±, on a 4.02 acre (±) parcel (net area) that sits on a portion of Parcel A of "Replat of Lots 1 and 2 of Fountain Hills Final Plat 705" (Bk.468, Pg.3, MCR) and is located at the northeast corner of Shea Boulevard and Monterey Drive. This site is currently a vacant parcel with no existing improvements. The site is bounded by developed property to the northeast, Shea Boulevard to the west and Monterey Drive to the north, and the Cereus Wash to the south. A vicinity map, aerial photo, legal description and the area's FIRM map are attached for reference in Appendix A of this report.

OFFSITE DRAINAGE & HYDRAULICS

The site is bounded on the west and north sides by existing curb and gutter. The east side is adjacent to developed residential lots. The south side is bounded by an existing storm water wash (Cereus Wash). The existing curb and gutter along Shea Boulevard slopes southeast and is conveyed to the Cereus Wash. The existing curb and gutter along Monterey Drive slopes northeast into the adjacent residential subdivision which eventually conveys the storm water to the Cereus Wash.

The offsite drainage generated from the public right of way areas of Shea Boulevard and Monterey Drive will continue to follow the historic flow. There are no proposed changes or additions to these systems by this project.

ONSITE DRAINAGE & DETENTION

Onsite detention will be provided for the 100-year pre-development vs. post development storm event for the area of this site. The site conveys the storm water through surface sheet flow to curb openings. The detention calculations are as follows, additional calculations are attached for reference in Appendix B:

Required volume: $V = A * C * P/12$

Overall Site Watershed

Pre-development Runoff C: 0.65 – Hillslopes, Sonoran Desert (Table 3.2-DDM for MC)

Post development Runoff C: 0.95 – Commercial (Table 3.2-DDM for MC)

Design Runoff C: 0.30

Rainfall: 2.21 inches – NOAA Atlas 14



TSC-FOUNTAIN HILLS

July 28, 2014

Watershed Area: 148,756 s.f.
Calculated Vol (req'd): 8,219 c.f.
Development Agreement Vol (reqd): 8,000 c.f.
Site Outfall: At the proposed concrete weir structure near the southeast corner of the site.
The weir elevation is set at 1537.00. The storm water then drains into the Cereus Wash.

	Overall Site Watershed
Basin #1	5,582 cf
Basin #2	3,244 cf
Volume Required (P.A.D. Plan)	8,000 cf
Volume Provided	8,826 cf

A copy of the preliminary onsite grading and drainage plans has been attached for reference in Appendix C.

ONSITE HYDRAULICS

The storm water in the parking areas are conveyed by sheet flow through curb openings to the detention basins. There are no storm drain pipes/catch basins within the parking areas conveying storm water to the detention basins. There is a concrete weir structure proposed to regulate the outflows from the detention basin to be equal to or less than pre-development flow rates.



TSC-FOUNTAIN HILLS

July 28, 2014

OTHER PROJECT INFORMATION

The extreme outfall for the project is at the proposed concrete weir structure near the southeast corner of the site. The weir elevation is set at 1537.00. The storm water then drains into the Cereus Wash.

The site is designed in an engineered sump condition, as the high and low curb are both higher than the proposed final floor elevation. However, the final floor elevation is significantly higher than the site outfall. The final floor elevations for this proposed development are designed at an elevation of 1548.00 for the main building and 1547.00 for the hay barn. The final floor elevations are designed at elevations over 7 feet lower than the high top of curb which is at an elevation of 1555.60. The final floor elevations are designed over 3.5 feet lower than the low top of curb which is at an elevation of 1551.75 feet. The final floor elevations are over 10 feet above the extreme outfall elevation of 1537.00 feet.

If the site is constructed according to the approved grading and drainage construction documents than the building finished floor will be protected from the inundation of storm water produced from the 100-year storm event for onsite and offsite flows.

A portion of the site is located in a special flood hazard area, zone AE, and a portion of the site is located in shaded zone X as defined by Firm Map 04013C1804L dated October 16, 2013. Zone AE is described as "The special flood hazard area is subject to the 100-year flood; base flood elevations determined." Shaded zone X is described as: "Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood." (see Figure in Appendix A).



TSC-FOUNTAIN HILLS

July 28, 2014

REFERENCES

Brater and King, *Handbook of Hydraulics*, 6th Ed, 1976

Sabol, Et al, *DRAINAGE DESIGN MANUAL for MARICOPA COUNTY, ARIZONA – Volume I, Hydrology*, June 2010.

Sabol, Et al, *DRAINAGE DESIGN MANUAL for MARICOPA COUNTY, ARIZONA – Volume II, Hydraulics*, June 2010.

DRAINAGE REGULATIONS for MARICOPA COUNTY, November 2010.

DRAINAGE POLICIES AND STANDARDS for MARICOPA COUNTY, June 2010.



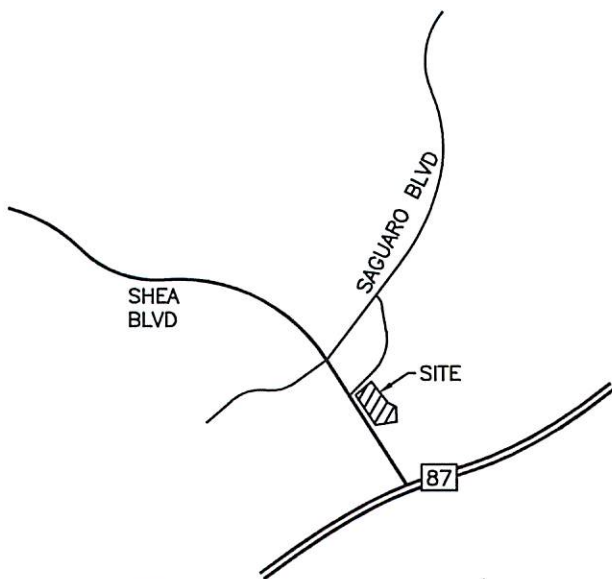
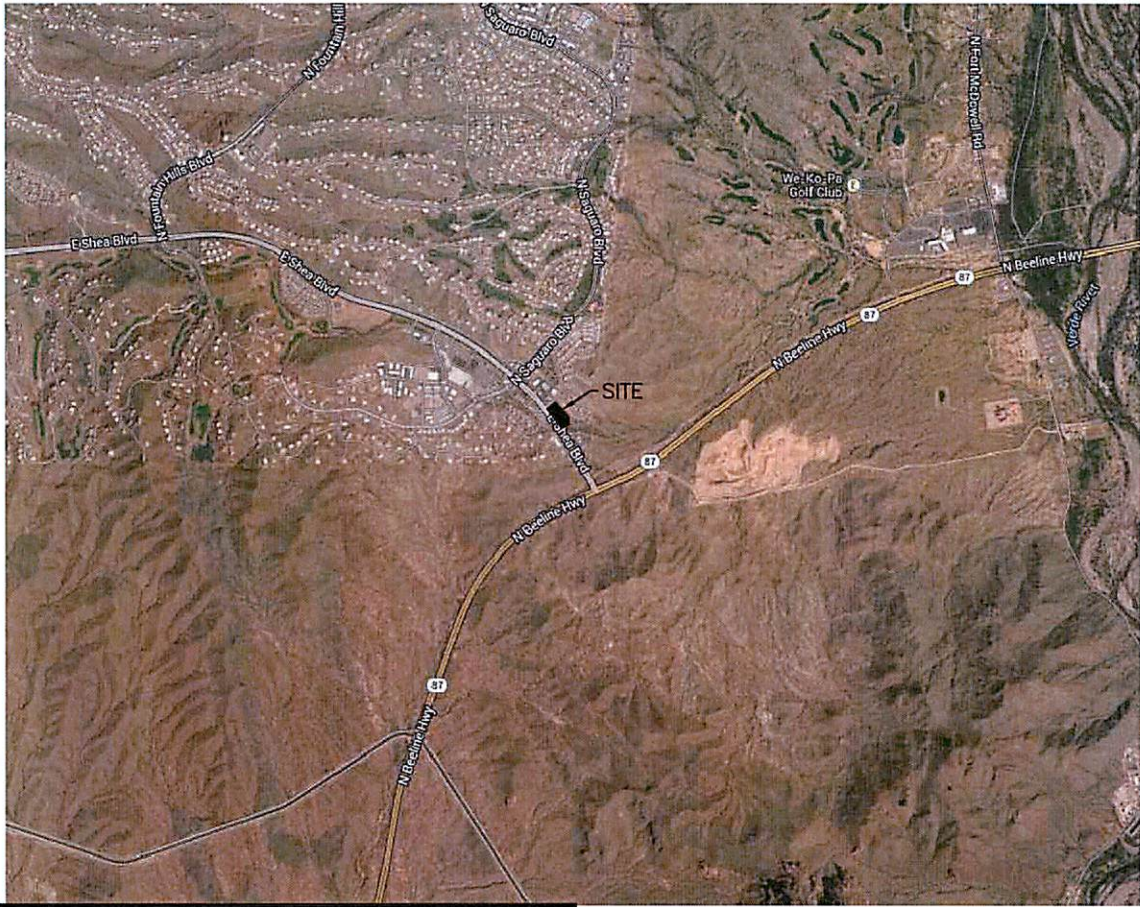
TSC-FOUNTAIN HILLS

July 28, 2014

APPENDIX A
VICINITY MAP
AERIAL PHOTO
LEGAL DESCRIPTION
FIRM MAP

12409 W. Indian School Rd., C-303, Avondale, AZ 85392

Phone (623)-536-1993



VICINITY MAP

SCALE: N.T.S. SEC. 26, T.3N., R.6E.



12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993

VICINITY MAP

PROJECT: TSC FOUNTAIN HILLS
 CEG# 14-029



**12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993**

AERIAL PHOTO
PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029

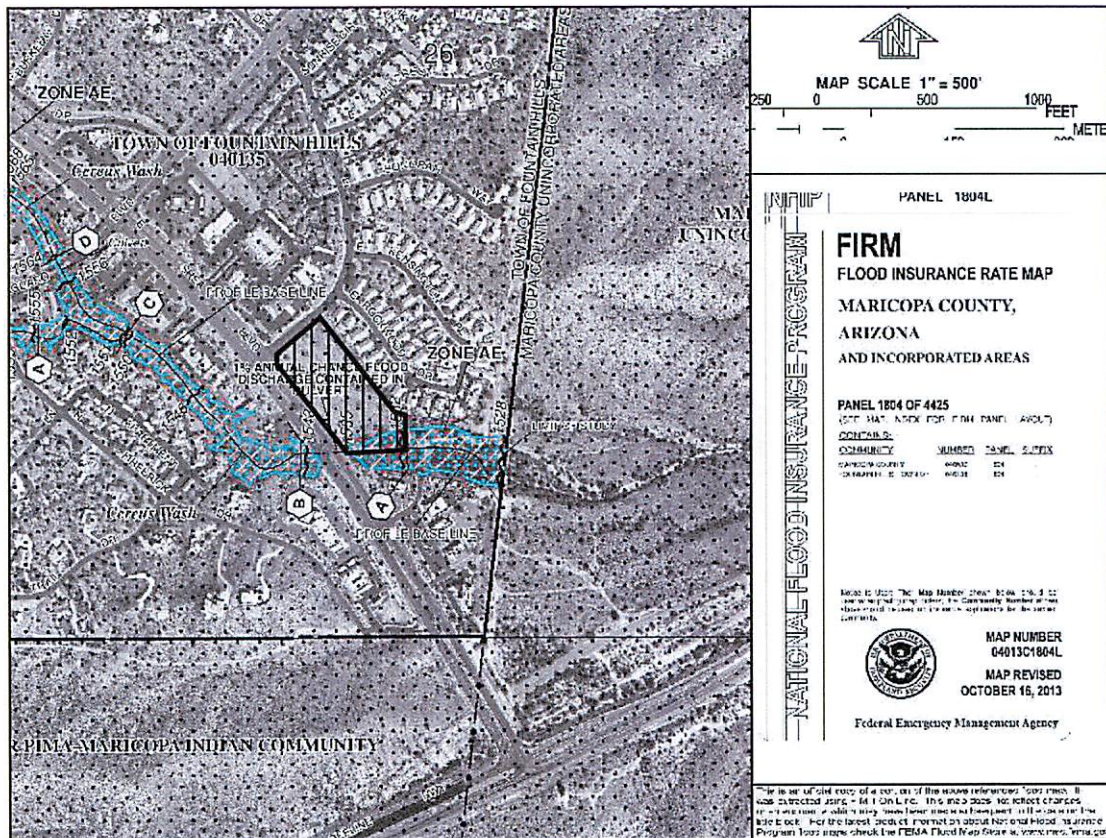
LEGAL DESCRIPTION

PARCEL A, OF REPLAT OF LOTS 1 AND 2 OF FOUNTAIN HILLS
FINAL PLAT 705, ACCORDING TO THE PLAT OF RECORD IN THE
OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY,
ARIZONA, IN BOOK 468 OF MAPS, PAGE 3.



**12409 W. INDIAN SCHOOL RD.
SUITE: C-303
AVONDALE, AZ 85392
PH: (623) 536-1993**

LEGAL DESCRIPTION
PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029



FEMA FLOOD INFORMATION

ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 04013C1804L DATED OCTOBER 16, 2013 THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO MAP, A PORTION WITHIN ZONE 'AE' THE REMAINDER WITHIN ZONE SHADED 'X'. ZONE 'AE' IS DESCRIBED AS "THE SPECIAL FLOOD HAZARD AREA IS SUBJECT TO THE 100-YEAR FLOOD; BASE FLOOD ELEVATIONS DETERMINED." ZONE SHADED 'X' IS DESCRIBED AS "AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD."



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FEMA FLOOD INFORMATION
PROJECT: TSC FOUNTAIN HILLS
CEG# 14-029

APPENDIX B

NOAA ATLAS 14 INFORMATION
PRE vs POST/FIRST FLUSH VOLUME CALCULATIONS
BASIN SIZING CALCULATIONS
DETENTION MODEL CALCULATIONS



NOAA Atlas 14, Volume 1, Version 5
 Location name: Fountain Hills, Arizona, US*
 Latitude: 33.5686°, Longitude: -111.7085°
 Elevation: 1543 ft*
 * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Helm, Lillian Hiner, Kazungu Maitania, Deborah Martin,
 Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao,
 Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.192 (0.158-0.241)	0.250 (0.207-0.315)	0.339 (0.278-0.424)	0.407 (0.331-0.506)	0.499 (0.400-0.617)	0.571 (0.451-0.701)	0.643 (0.499-0.788)	0.717 (0.548-0.877)	0.817 (0.609-0.997)	0.892 (0.651-1.09)
10-min	0.292 (0.241-0.366)	0.381 (0.316-0.479)	0.516 (0.423-0.645)	0.619 (0.504-0.770)	0.760 (0.609-0.939)	0.869 (0.686-1.07)	0.979 (0.760-1.20)	1.09 (0.834-1.33)	1.24 (0.926-1.52)	1.36 (0.991-1.66)
15-min	0.363 (0.298-0.454)	0.473 (0.391-0.594)	0.640 (0.524-0.800)	0.768 (0.625-0.954)	0.942 (0.755-1.16)	1.08 (0.851-1.32)	1.21 (0.943-1.49)	1.35 (1.03-1.65)	1.54 (1.15-1.88)	1.68 (1.23-2.06)
30-min	0.488 (0.402-0.611)	0.637 (0.527-0.799)	0.862 (0.706-1.08)	1.03 (0.841-1.28)	1.27 (1.02-1.57)	1.45 (1.15-1.78)	1.64 (1.27-2.00)	1.82 (1.39-2.23)	2.08 (1.55-2.53)	2.27 (1.65-2.77)
60-min	0.604 (0.498-0.757)	0.788 (0.652-0.989)	1.07 (0.874-1.33)	1.28 (1.04-1.59)	1.57 (1.26-1.94)	1.79 (1.42-2.21)	2.02 (1.57-2.48)	2.25 (1.72-2.76)	2.57 (1.91-3.14)	2.81 (2.05-3.43)
2-hr	0.690 (0.576-0.838)	0.893 (0.747-1.09)	1.19 (0.988-1.45)	1.42 (1.17-1.72)	1.72 (1.40-2.08)	1.96 (1.58-2.37)	2.21 (1.75-2.67)	2.46 (1.91-2.96)	2.79 (2.11-3.37)	3.06 (2.26-3.71)
3-hr	0.744 (0.622-0.917)	0.953 (0.799-1.18)	1.25 (1.04-1.54)	1.48 (1.23-1.82)	1.81 (1.47-2.21)	2.07 (1.66-2.51)	2.34 (1.84-2.85)	2.63 (2.03-3.19)	3.02 (2.27-3.67)	3.34 (2.45-4.06)
6-hr	0.895 (0.770-1.06)	1.13 (0.976-1.34)	1.45 (1.24-1.71)	1.70 (1.44-2.00)	2.04 (1.71-2.39)	2.31 (1.91-2.70)	2.59 (2.10-3.03)	2.88 (2.29-3.37)	3.27 (2.54-3.84)	3.58 (2.72-4.21)
12-hr	1.02 (0.888-1.18)	1.28 (1.12-1.49)	1.62 (1.41-1.88)	1.88 (1.63-2.17)	2.24 (1.91-2.58)	2.52 (2.12-2.89)	2.80 (2.33-3.22)	3.08 (2.53-3.55)	3.47 (2.78-4.01)	3.77 (2.96-4.39)
24-hr	1.27 (1.14-1.42)	1.60 (1.45-1.80)	2.06 (1.85-2.32)	2.43 (2.17-2.73)	2.94 (2.61-3.29)	3.34 (2.94-3.73)	3.76 (3.29-4.20)	4.19 (3.63-4.69)	4.79 (4.09-5.37)	5.26 (4.45-5.93)
2-day	1.41 (1.27-1.59)	1.80 (1.61-2.02)	2.35 (2.10-2.63)	2.78 (2.48-3.11)	3.39 (3.00-3.79)	3.87 (3.40-4.32)	4.38 (3.81-4.90)	4.91 (4.24-5.51)	5.65 (4.81-6.37)	6.24 (5.25-7.06)
3-day	1.51 (1.36-1.69)	1.92 (1.73-2.15)	2.52 (2.26-2.82)	3.00 (2.68-3.35)	3.68 (3.26-4.10)	4.22 (3.72-4.70)	4.80 (4.20-5.35)	5.41 (4.68-6.05)	6.26 (5.34-7.04)	6.95 (5.87-7.85)
4-day	1.61 (1.45-1.79)	2.05 (1.84-2.29)	2.69 (2.42-3.00)	3.22 (2.88-3.58)	3.96 (3.52-4.41)	4.57 (4.04-5.08)	5.22 (4.58-5.80)	5.90 (5.12-6.59)	6.87 (5.87-7.70)	7.67 (6.48-8.63)
7-day	1.79 (1.60-2.01)	2.28 (2.04-2.56)	3.01 (2.68-3.38)	3.60 (3.19-4.03)	4.43 (3.91-4.96)	5.12 (4.49-5.73)	5.85 (5.08-6.55)	6.62 (5.71-7.44)	7.73 (6.56-8.71)	8.62 (7.24-9.77)
10-day	1.98 (1.77-2.21)	2.53 (2.26-2.83)	3.33 (2.97-3.72)	3.97 (3.53-4.44)	4.88 (4.32-5.45)	5.62 (4.94-6.26)	6.40 (5.59-7.15)	7.23 (6.25-8.09)	8.40 (7.16-9.43)	9.35 (7.88-10.5)
20-day	2.45 (2.19-2.74)	3.15 (2.82-3.52)	4.13 (3.70-4.62)	4.89 (4.36-5.46)	5.92 (5.26-6.60)	6.71 (5.94-7.49)	7.53 (6.62-8.43)	8.36 (7.30-9.38)	9.49 (8.21-10.7)	10.4 (8.88-11.7)
30-day	2.89 (2.59-3.22)	3.71 (3.33-4.13)	4.87 (4.36-5.42)	5.75 (5.15-6.39)	6.96 (6.19-7.73)	7.88 (6.98-8.76)	8.84 (7.77-9.83)	9.81 (8.57-10.9)	11.1 (9.62-12.5)	12.1 (10.4-13.7)
45-day	3.45 (3.09-3.85)	4.44 (3.97-4.96)	5.83 (5.21-6.50)	6.86 (6.12-7.66)	8.24 (7.31-9.21)	9.29 (8.21-10.4)	10.3 (9.10-11.6)	11.4 (9.96-12.8)	12.8 (11.1-14.4)	13.9 (11.9-15.7)
60-day	3.88 (3.48-4.33)	5.00 (4.48-5.58)	6.55 (5.86-7.30)	7.68 (6.85-8.57)	9.16 (8.15-10.2)	10.3 (9.09-11.5)	11.4 (10.0-12.8)	12.5 (10.9-14.0)	13.9 (12.1-15.7)	15.0 (13.0-17.0)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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NOAA Atlas 14, Volume 1, Version 5
Location name: Fountain Hills, Arizona, US*
Latitude: 33.5686°, Longitude: -111.7085°
Elevation: 1543 ft*
 * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Helm, Lillian Hiner, Kazungu Maitania, Deborah Martin,
 Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao,
 Geoffrey Bonnln, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	2.30 (1.90-2.89)	3.00 (2.48-3.78)	4.07 (3.34-5.09)	4.88 (3.97-6.07)	5.99 (4.80-7.40)	6.85 (5.41-8.41)	7.72 (5.99-9.46)	8.60 (6.58-10.5)	9.80 (7.31-12.0)	10.7 (7.81-13.1)
10-min	1.75 (1.45-2.20)	2.29 (1.90-2.87)	3.10 (2.54-3.87)	3.71 (3.02-4.62)	4.56 (3.65-5.63)	5.21 (4.12-6.40)	5.87 (4.56-7.19)	6.55 (5.00-8.01)	7.46 (5.56-9.11)	8.15 (5.95-9.96)
15-min	1.45 (1.19-1.82)	1.89 (1.56-2.38)	2.56 (2.10-3.20)	3.07 (2.50-3.82)	3.77 (3.02-4.66)	4.31 (3.40-5.29)	4.86 (3.77-5.95)	5.41 (4.14-6.62)	6.16 (4.60-7.53)	6.73 (4.91-8.23)
30-min	0.976 (0.804-1.22)	1.27 (1.05-1.60)	1.72 (1.41-2.15)	2.07 (1.68-2.57)	2.54 (2.03-3.13)	2.90 (2.29-3.56)	3.27 (2.54-4.01)	3.64 (2.79-4.46)	4.15 (3.09-5.07)	4.53 (3.31-5.54)
60-min	0.604 (0.498-0.757)	0.788 (0.652-0.989)	1.07 (0.874-1.33)	1.28 (1.04-1.59)	1.57 (1.26-1.94)	1.79 (1.42-2.21)	2.02 (1.57-2.48)	2.25 (1.72-2.76)	2.57 (1.91-3.14)	2.81 (2.05-3.43)
2-hr	0.345 (0.288-0.419)	0.446 (0.374-0.544)	0.594 (0.494-0.722)	0.708 (0.583-0.859)	0.862 (0.701-1.04)	0.981 (0.788-1.19)	1.10 (0.872-1.33)	1.23 (0.952-1.48)	1.40 (1.06-1.68)	1.53 (1.13-1.85)
3-hr	0.248 (0.207-0.305)	0.317 (0.266-0.393)	0.416 (0.347-0.512)	0.494 (0.408-0.606)	0.603 (0.490-0.735)	0.689 (0.552-0.837)	0.780 (0.614-0.948)	0.875 (0.677-1.06)	1.01 (0.758-1.22)	1.11 (0.817-1.35)
6-hr	0.149 (0.129-0.177)	0.189 (0.163-0.224)	0.241 (0.207-0.286)	0.283 (0.241-0.334)	0.341 (0.285-0.399)	0.385 (0.318-0.450)	0.432 (0.351-0.507)	0.480 (0.383-0.563)	0.546 (0.425-0.641)	0.599 (0.454-0.704)
12-hr	0.085 (0.074-0.098)	0.107 (0.093-0.124)	0.134 (0.117-0.156)	0.156 (0.135-0.180)	0.186 (0.159-0.214)	0.209 (0.176-0.240)	0.232 (0.193-0.267)	0.256 (0.210-0.294)	0.288 (0.230-0.333)	0.313 (0.246-0.365)
24-hr	0.053 (0.048-0.059)	0.067 (0.060-0.075)	0.086 (0.077-0.097)	0.101 (0.091-0.114)	0.123 (0.109-0.137)	0.139 (0.123-0.156)	0.157 (0.137-0.175)	0.175 (0.151-0.196)	0.200 (0.171-0.224)	0.219 (0.185-0.247)
2-day	0.029 (0.026-0.033)	0.037 (0.034-0.042)	0.049 (0.044-0.055)	0.058 (0.052-0.065)	0.071 (0.062-0.079)	0.081 (0.071-0.090)	0.091 (0.079-0.102)	0.102 (0.088-0.115)	0.118 (0.100-0.133)	0.130 (0.109-0.147)
3-day	0.021 (0.019-0.023)	0.027 (0.024-0.030)	0.035 (0.031-0.039)	0.042 (0.037-0.047)	0.051 (0.045-0.057)	0.059 (0.052-0.065)	0.067 (0.058-0.074)	0.075 (0.065-0.084)	0.087 (0.074-0.098)	0.097 (0.081-0.109)
4-day	0.017 (0.015-0.019)	0.021 (0.019-0.024)	0.028 (0.025-0.031)	0.034 (0.030-0.037)	0.041 (0.037-0.046)	0.048 (0.042-0.053)	0.054 (0.048-0.060)	0.061 (0.053-0.069)	0.072 (0.061-0.080)	0.080 (0.068-0.090)
7-day	0.011 (0.010-0.012)	0.014 (0.012-0.015)	0.018 (0.016-0.020)	0.021 (0.019-0.024)	0.026 (0.023-0.030)	0.030 (0.027-0.034)	0.035 (0.030-0.039)	0.039 (0.034-0.044)	0.046 (0.039-0.052)	0.051 (0.043-0.058)
10-day	0.008 (0.007-0.009)	0.011 (0.009-0.012)	0.014 (0.012-0.015)	0.017 (0.015-0.018)	0.020 (0.018-0.023)	0.023 (0.021-0.026)	0.027 (0.023-0.030)	0.030 (0.026-0.034)	0.035 (0.030-0.039)	0.039 (0.033-0.044)
20-day	0.005 (0.005-0.006)	0.007 (0.006-0.007)	0.009 (0.008-0.010)	0.010 (0.009-0.011)	0.012 (0.011-0.014)	0.014 (0.012-0.016)	0.016 (0.014-0.018)	0.017 (0.015-0.020)	0.020 (0.017-0.022)	0.022 (0.019-0.024)
30-day	0.004 (0.004-0.004)	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.010 (0.009-0.011)	0.011 (0.010-0.012)	0.012 (0.011-0.014)	0.014 (0.012-0.015)	0.015 (0.013-0.017)	0.017 (0.014-0.019)
45-day	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.008-0.011)	0.011 (0.009-0.012)	0.012 (0.010-0.013)	0.013 (0.011-0.015)
60-day	0.003 (0.002-0.003)	0.003 (0.003-0.004)	0.005 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.008-0.011)	0.010 (0.009-0.012)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

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PROJECT: TSC FH
CEG# 14-029

PRE. VS. POST DEVELOPMENT CALCULATIONS

PRE-DEVELOPMENT

Surface Coefficient C 0.65 Hillslopes, Sonoran Desert (Table 3.2)

POST DEVELOPMENT

Surface Coefficient C 0.95 Commercial (Table 3.2)

PRE. VS. POST DEVELOPMENT

Surface Coefficient C 0.3

100-hr, 2-hr Rainfall P 2.21 in

Area A 148756 sf

Calculated Req'd Volume VOLreq'd 8219 cf

Required Volume (PAD Plan) VOLreq'd 8000 cf <----- GOVERNS

FIRST FLUSH CALCULATIONS

Surface Coefficient C 1.00

100-hr, 2-hr Rainfall P 0.5 in

Area A 148756 sf

Required Volume VOLreq'd 6198 cf

STORMWATER RETENTION BASIN CALCULATIONS

PROJECT TITLE: **TSC - Fountain Hills**

CEG JOB# **14029**

DATE: **25-Jun-14**

REQUIRED RETENTION

Rainfall depth **0.50** inches

ADDITIONAL FACTOR

F **1.00**

	Offsite #1	Offsite #2	Offsite #3	Offsite #4
C				
A (sf)				
Vreq (cf)				
Basin #(s)				
Vol prov'd				
OK?				

	Onsite #1	Onsite #2	Onsite #3	Onsite #4	Onsite #5	Onsite #6	Onsite #7	Onsite #8	Onsite #9	Onsite #10
C	1.000									
A (sf)	148756									
Vreq (cf)	6198									
Basin #(s)	1,2,									
Vol prov'd	8826									
OK?	OK									

	REQUIRED	PROVIDED	
TOTAL OFFSITE	0 cf	0 cf	OK
TOTAL ONSITE	6198 cf	8826 cf	OK
TOTAL-TOTAL	6198 cf	8826 cf	OK

1 Basin #1

ELEV	AREA (sf)	VOL (cf)
40.0	2885	
39.0	2170	2527.5
38.0	1518	1844.0
37.0	902	1210.0
TOTAL VOLUME		5581.5

2 Basin #2

ELEV	AREA (sf)	VOL (cf)
40.0	2356	
39.0	1600	1978.0
38.0	932	1266.0
TOTAL VOLUME		3244.0

3 Basin #3

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

4 Basin #4

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

5 Basin #5

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

6 Basin #6

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

7 Basin #7

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

8 Basin #8

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

9 Basin #9

ELEV	AREA (sf)	VOL (cf)
TOTAL VOLUME		0.0

A Tank group A

DIA	LEN	VOL (cf)
TOTAL VOLUME		0.0

B Tank group B

DIA	LEN	VOL (cf)
TOTAL VOLUME		0.0

C Tank group C

DIA	LEN	VOL (cf)
TOTAL VOLUME		0.0

D Tank group D

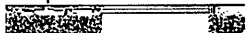
DIA	LEN	VOL (cf)
TOTAL VOLUME		0.0

E Tank group E

DIA	LEN	VOL (cf)
TOTAL VOLUME		0.0



Runoff from onsite watershed - routed through proposed basin

TITLE: TSC - FOUNTAIN HILLS						Storm distribution: Maricopa County					
DRAIN PIPES						ERROR MESSAGES					
	1	2	3	4	5	FLOW DELTA					
# of pipes						100 YR PEAK Q 0.05					
Diameter (in)						10 YR PEAK Q 2.02					
Inlet elev (ft)						2 YR PEAK Q 1.68					
Inlet coeff (C)						FREEBOARD					
(0.5-1.0)						100 YR DEPTH 1.22					
Neglect if 4" (Y/N)	n	n	n	n	n	10 YR DEPTH 1.78					
g (ft/s^2)	32.2	32.2	32.2	32.2	32.2	2 YR DEPTH 2.33					
BROAD CRESTED WEIR:											
	1	2	3	4	5						
Crest elev	1540.00	1539.00	1537.00								
Width	20.0	3.0	1.0								
Weir coeff	3.0	3.0	3.0								
BASIN DEFINITION											
	1	2	3	4	5	6	7	8	9	10	
Elevation (ft)	1537.00	1537.00	1537.00	1537.00	1537.00	1537.00	1538.00	1539.00	1540.00	1541.00	
Area (sq.ft.)	902.00	902.00	902.00	902.00	902.00	902.00	2450.00	3770.00	5241.00	6925.00	
Volume (cu.ft.)	0.00	0.00	0.00	0.00	0.00	0.00	1676.00	4786.00	9291.50	15374.50	
INPUT FLOWS						CALCULATIONS					
	PEAK Q	Tc									
Exist 100 year	20.18	5.00									
Exist 10 year	12.93	5.00									
Exist 2 year	8.14	5.00									
Future 100 year	27.62	5.00									
Future 10 year	17.54	5.00									
Future 2 year	11.05	5.00									
BASIN PERCOLATION											
Bottom perc rate	60.00 (min/in)										
THRESHOLD RETENTION											
Soil type on-site (B,C,D,I)	Drainage area acres										
Developed condition:	1 hr, -1-yr rainfall depth 0.00 in										
	Existing runoff coeff										
	Future runoff coeff										
Notes:											
						THRESHOLD RETENTION NOT APPLICABLE					

Routing Data



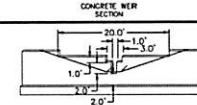
TSC-FOUNTAIN HILLS

July 28, 2014

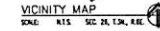
APPENDIX C
PRELIMINARY GRADING & DRAINAGE PLAN

PRELIMINARY GRADING & DRAINAGE PLAN FOR **TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS** NEC SHEA BLVD. & MONTEREY DRIVE

SITE INFORMATION	
APN	176-10-799
NET AREA	174,937 S.F. (4.02 ACRES)
ZONING	C-2
SETBACKS	FRONT 10' REAR 10' SIDE 25' (ADJ. RESIDENTIAL)
MAXIMUM BUILDING HEIGHT	40'
MAXIMUM BUILDING COVERAGE	60%



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	565.40'	6907.49'	43°34'4"
C2	5.93'	435.00'	0°46'50"



DEVELOPMENT DATA

LEGAL DESCRIPTION

PARCEL A, OF REPLAT OF LOTS 1 AND 2 OF FOUNTAIN HILLS FINAL PLAT 705, ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, IN BOOK 468 OF MAPS, PAGE 3.

FEMA FLOOD INFORMATION

ACCORDING TO FLOOD INSURANCE RATE MAP NO. 04013C1804, DATED OCTOBER 16, 2013 THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO MAP. A PORTION WITHIN ZONE 'AE' THE REMAINDER WITHIN ZONE SHOWN 'X'. ZONE 'AE' IS DESCRIBED AS 'THE SPECIAL FLOOD HAZARD AREA IS SUBJECT TO THE 100-YEAR FLOOD; BASE FLOOD ELEVATIONS DETERMINED. ZONE SHOWN 'X' IS DESCRIBED AS 'AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.'

RETENTION CALCULATIONS

AN EXISTING WASH ROAD THROUGH THE PROPERTY TO THE SOUTH OF THE PROPOSED BUILDING WITH A HILLSIDE PROTECTION EASEMENT. A DETENTION BASIN WILL BE CONSTRUCTED JUST OUTSIDE OF THE EASEMENT WITH A WEIR OVERFLOW INTO THE EXISTING WASH ROAD.

VOLUME REQUIRED	
PER DEVELOPMENT AGREEMENT: V=8,000 CF	
VOLUME PROVIDED	
BASIN #1	V=5,582 CF
BASIN #2	V=3,244 CF
VOLUME PROVIDED	V=8,826 CF
SITE FLOWS	
AREA	A=3.44 AC
TIME OF CONCENTRATION	Tc=5.0 MIN
INTENSITY	i=6.5 IN/HR
PRE FLOWRATE	Q=0.69
POST FLOWRATE	Qpost=20.15 cfs

KEYNOTES

1. NEW ASPHALT PAVEMENT
2. NEW CONCRETE PAVEMENT
3. NEW 8" VERTICAL CONCRETE CURB
4. NEW CONCRETE VERTICAL CURB AND GUTTER
5. NEW 3" WIDE CURB OPENING
6. NEW RIPRAP EROSION PROTECTION
7. NEW DETENTION BASIN, DEPTH AS NOTED, 3:1 SLOPES
8. NEW FIRE LINE
9. NEW FIRE HYDRANT
10. NEW BACKFLOW DEVICE WITH REMOTE F.D.C. - 4" STORE
11. NEW WATER LINE SERVICE/METER (DOMESTIC)
12. NEW SINKER LINE
13. NEW VALLEY GUTTER
14. NEW SURFACE GRADE/BREAK
15. NEW WATER LINE SERVICE/METER (LANDSCAPING)
16. NEW SIDEWALK
17. EXISTING CONCRETE VERTICAL CURB & GUTTER
18. EXISTING DRIVEWAY ENTRANCE
19. NEW STORM DRAIN PIPE AT BASIN INVERTS
20. EXISTING FIRE HYDRANT
21. EXISTING 60" CAP STORM DRAIN PIPE
22. EXISTING DRIVEWAY ENTRANCE TO BE DEMOLISHED & REMOVED
23. EXISTING WASH
24. NEW RIPRAP DETENTION BASIN SPILLWAY
25. NEW CONCRETE WEIR STRUCTURE
26. NEW RETAINING WALL W/ HANDRAIL, HEIGHT VARIES (1'-5').
27. NEW HANDRAIL ON TOP OF RETAINING WALL
28. NEW 8" CHAIN BLOCK SCREEN WALL/2' RETAINING WALL COMBO.
29. NEW 8" WROUGHT IRON FENCE
30. NEW ROLLING GATE W/FIRE DEPARTMENT KNOCK BOX
31. NEW SAFETY HANDRAIL ON EXISTING HEADWALL
32. NEW 8" CHAIN BLOCK SCREEN WALL

LEGEND

- FOUND MONUMENT AS NOTED
- SET REBAR AT PROPERTY CORNER
- W.C.R. MARICOPA COUNTY RECORDER
- ASSESSORS PARCEL NUMBER
- FOUND
- DRAINAGE EASEMENT
- SEWAGE EASEMENT
- PUBLIC UTILITY EASEMENT
- NO VEHICLE ACCESS EASEMENT
- TELEPHONE MARKER
- ELECTRICAL TRANSFORMER
- SEWAGE/STORMWATER MONITORING WELL
- SHADY/SKY SHED MARKER
- MONUMENT TREE
- PAID VERGE TREE
- MONUMENT
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT-THICK TRAFFIC
- ASPHALT PAVEMENT-PASSENGER CAR
- EXISTING LINE AS NOTED
- PROPERTY LINE
- RIGHT OF WAY
- CENTERLINE OF ROAD
- SEWER LINE AS NOTED
- 5' ELEVATION CONTOUR INTERVAL
- 1' ELEVATION CONTOUR INTERVAL
- 100 YEAR FLOODPLAIN PER FIRM MAP
- MATERIAL PER RECORD DWG'S
- SOMEONE PER RECORD DWG'S
- UNDERGROUND GAS LINE
- UNDERGROUND ELECTRIC LINE
- 5/8" CAP STORM DRAIN
- WADSWORTH SCREEN WALL
- CONCRETE PAVEMENT
- CONCRETE PAVEMENT
- WATER VALVE
- FIRE HYDRANT
- SPOT ELEVATION

DEVELOPER
FOUNTAIN HILLS DEV GROUP, LLC
155 W. NEW YORK AVENUE
SOUTHVIEW PHASE AC 28387
(915) 850-5894
CONTACT: GARY NELIA

ENGINEER
CIC, INC.
12409 W. BRIAN SCHOOL RD.
SUITE J C-303
MESA, AZ 85208
CONTACT: MICHAEL BROWN, PE

TRACTOR SUPPLY COMPANY-FOUNTAIN HILLS
NEC SHEA BLVD & MONTEREY DRIVE
PRELIMINARY GRADING & DRAINAGE PLAN
17130 E. SHEA BLVD.
FOUNTAIN HILLS, MARICOPA COUNTY, AZ

DRAWN BY: NEB
CHECKED BY: NEB
DATE: 07/28/14
SCALE: 1"=30'
PROJECT #: 14-029
LAST MODIFIED BY:

PO BOX 1368
GLENDALE AZ 85311
PH: (623) 594-1993



SHEET 1 OF 1
C0.01

